# Staff Report

**VOLUME II** 

# Revision of the Clean Water Act Section 303(d) List of Water Quality Limited Segments

Water Body Fact Sheets
Supporting the Listing and
Delisting Recommendations





#### **STATE OF CALIFORNIA**

Arnold Schwarzenegger, Governor

## **CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY**

Linda S. Adams, Secretary

# STATE WATER RESOURCES CONTROL BOARD

P.O. Box 100 Sacramento, CA 95812-0100 (916) 341-5250

Homepage: http://www.waterboards.ca.gov

Tam M. Doduc, Chair Gerald D. Secundy, Vice Chair Arthur G. Baggett, Jr., Member Charles R. Hoppin, Member Gary Wolff, P.E., Ph.D. Member

Celeste Cantú, Executive Director Thomas Howard, Chief Deputy Director Beth Jines, Chief Deputy Director

# STATE WATER RESOURCES CONTROL BOARD DIVISION OF WATER QUALITY

STAFF REPORT

REVISION OF THE CLEAN WATER ACT SECTION 303(d)
LIST OF WATER QUALITY LIMITED SEGMENTS

WATER BODY FACT SHEETS SUPPORTING THE LISTING AND DELISTING RECOMMENDATIONS

**VOLUME II** 

# Staff Report by the Division of Water Quality State Water Resources Control Board

# REVISION OF THE CLEAN WATER ACT SECTION 303(d) LIST OF WATER QUALITY LIMITED SEGMENTS

# Water Body Fact Sheets Supporting the Listing and Delisting Recommendations

# Volume II

This volume of the Staff Report contains the fact sheets to support the revision of the Clean Water Act Section 303(d) list of water quality limited segments. The staff report is divided into four volumes: (1) Volume I contains the listing methodology and a summary of the additions, deletions, changes, and priorities; (2) Volume II contains summaries of the proposed changes (new listings, delistings, and area changes) to the section 303(d) list for the North Coast, San Francisco Bay, Central Coast, and Los Angeles regions; (3) Volume III contains summaries of the proposed changes (new listings, delistings, and area changes) for the Central Valley, Lahontan, Colorado River Basin, Santa Ana, and San Diego regions; and (4) Volume IV contains responses to comments.

This document is Volume III of the Staff Report. Changes proposed for the 2006 section 303(d) list are included for the following RWQCBs:

- North Coast (Region 1)
- San Francisco Bay (Region 2)
- Central Coast (Region 3)
- Los Angeles (Region 4)

Several new fact sheets have been added to the staff report and many of the fact sheets in the September 30, 2005 draft of this volume have been changed in response to comments. If a fact sheet was modified, it is grouped with new and other changed fact sheets in a "New or Revised" fact sheets section. Fact sheets that were not revised are grouped in their own section with the original summaries presented in the September 2005 version of Volume II. Each of these sections in this volume are further divided into the following parts:

• <u>List</u>: This section contains fact sheets for all pollutant-water body combinations in the region recommended for placement on the section 303(d) list.

- <u>List as Being Addressed</u>: This section contains fact sheets for pollutant-water body combinations in the region recommended for placement in the Water Quality Limited Segments Being addressed category of the section 303(d) list.
- **Delist**: This section contains fact sheets for all water body pollutant combinations in the region recommended for removal from the section 303(d) list.
- <u>Area Changes</u>: This section contains fact sheets for water bodies in the region where major mapping changes are recommended.

References for all data and information used are presented in Appendix 2 of Volume I of the Staff Report: Revision of the Clean Water Act Section 303(d) List of Water Quality Limited Segments.

To navigate the electronic version of the document please use the bookmarks.

# Fact Sheets Supporting Revision of the Section 303(d) List



November 2006

# **Table of Contents**

IEW OR REVISED FACT SHEETS	3
LISTING RECOMMENDATIONS	4
Bodega HU, Bodega Harbor HA	5
Exotic Species	
Eureka Plain HU, Humboldt Bay	
Dioxin Compounds	
Klamath River HU, Lower HA, Klamath Glen HSA	
Sedimentation/Siltation	
Mendocino Coast HU, Noyo River HA, Noyo River	
Temperature, water	
Russian River HU, Lower Russian River HA, Guerneville HSA	
pH	
Trinity River HU, Upper HA, Trinity River, East Fork	
Mercury	20
LIST AS BEING ADDRESSED RECOMMENDATIONS	22
Bodega HU, Estero de San Antonio HA, Stemple Creek/Estero do San Antonio	23
Nutrients	23
Sediment	
Cape Mendocino HU, Mattole River HA, Mattole River	
Sedimentation/Siltation	
Eel River HU, Middle Fork HA	
Sedimentation/Siltation	
Eel River HU, North Fork HA	
Sedimentation/Siltation	
Eel River HU, South Fork HA	
Sedimentation/Siltation	
Eel River HU, Van Duzen River HA	
Sedimentation/Siltation	
Klamath River HU, Salmon River HA	
Temperature, water	
Klamath River HU, Scott River HASedimentation/Siltation	
Temperature, water	
Mendocino Coast HU, Albion River HA, Albion River	
Sedimentation/Siltation	
Mendocino Coast HU, Big River HA, Big River	
Sedimentation/Siltation	
Mendocino Coast HU, Garcia River HA, Garcia River	
Sediment	
Mendocino Coast HU, Gualala River HA, Gualala River	
Sedimentation/Siltation	
Mendocino Coast HU, Navarro River HA	
Sedimentation/Siltation	
Mendocino Coast HU, Navarro River HA, Delta	

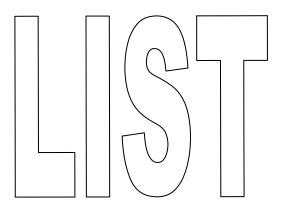
Sedimentation/Siltation	38
Mendocino Coast HU, Noyo River HA, Noyo River	
Sedimentation/Siltation	
Mendocino Coast HU, Rockport HA, Ten Mile River HSA	
Sedimentation/Siltation	
Redwood Creek HU, Redwood Creek	
Sedimentation/Siltation	
Trinity River HU, Lower Trinity HA	
Sedimentation/Siltation Trinity River HU, Middle HA	
Sedimentation/Siltation	
Trinity River HU, South Fork HA	
Sedimentation/Siltation	
Trinity River HU, Upper HA	
Sedimentation/Siltation	
Trinity River HU, Upper HA, Trinity River, East Fork	46
Sedimentation/Siltation	46
DELISTING RECOMMENDATIONS	47
Klamath River HU, Lost River HA, Tule Lake and Mt Dome HSAs	48
Temperature, water	
ORIGINAL FACT SHEETS	50
LISTING RECOMMENDATIONS	51
	51 52
LISTING RECOMMENDATIONS Clair Engle Lake	51 52 52
LISTING RECOMMENDATIONS  Clair Engle Lake	51 52 54 54
LISTING RECOMMENDATIONS Clair Engle Lake	51 52 54 54
LISTING RECOMMENDATIONS Clair Engle Lake	51 52 54 54 56
LISTING RECOMMENDATIONS Clair Engle Lake	51 52 54 54 56 56
LISTING RECOMMENDATIONS Clair Engle Lake	51 52 54 54 56 56
LISTING RECOMMENDATIONS Clair Engle Lake	51 52 54 54 56 56
LISTING RECOMMENDATIONS Clair Engle Lake	51 52 54 54 56 56 58 58
LISTING RECOMMENDATIONS  Clair Engle Lake	51 52 54 56 56 58 58 60
LISTING RECOMMENDATIONS Clair Engle Lake	51 52 54 56 56 58 60 60
LISTING RECOMMENDATIONS Clair Engle Lake	51 52 54 56 56 58 60 60
LISTING RECOMMENDATIONS Clair Engle Lake	51 52 54 54 56 56 58 60 60 63 63
LISTING RECOMMENDATIONS Clair Engle Lake	51 52 54 56 56 58 58 60 60 63 63
LISTING RECOMMENDATIONS Clair Engle Lake	51 52 54 56 56 58 60 60 63 63 63 84

# North Coast Region (1)

# Rewised Ract Sheets

New or Revised Fact Sheets

# North Coast Region (1)



Recommendations to place waters and pollutants on the section 303(d) List

Water Segment: Bodega HU, Bodega Harbor HA

Pollutant: Exotic Species

Decision: List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under section 3.10 of the Listing Policy. Under section 3.10 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Over a nine-year period, experiments strongly indicated that non-native presence was responsible for sharp native benthic community abundance declines in Bodega Bay Harbor.

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

This conclusion is based on the staff findings that:

- 1) This study was conducted from 1989-1998, excluding 1992.
- 2) Path analysis was applied on and similar methods were used to measure abundance data.
- 3) The non-native European green crab exerted 'top-down' control significantly reducing the abundances of several native invertebrate species monitored, which showed sharp declines within 3 years of green crab arrival.
- 4) Field and lab experiments indicated green crab predation was responsible for these declines.
- 5) It cannot be determined if the trend in water quality is expected to meet water standards by the next listing cycle.
- 6) Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Population/Community Degradation

Beneficial Use: MA - Marine Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as

specified by the Regional Water Board will determine compliance with this objective.

Data Used to Assess Water Quality:

Non-native green crab (Grosholz et al., 2000) was first observed in 1993 in Bodega Bay Harbor, CA. This study measured the impact of the green crab, Carcinus maenus, on a coastal marine food web and found this predator exerted strong 'top-down' control, significantly reducing the abundances of several native invertebrate species monitored over a nine year period (Grosholz et al. 2000). Several native species showed sharp declines within three years of the arrival of green crabs. Field and lab experiments indicated that green crab predation was responsible for these declines. To analyze the strength of direct and indirect impacts of green crab predation, path analysis was employed on the abundance data.

Spatial Representation:

Bodega Bay Harbor (BBH) in California is two kilometers squared in area. Abundance of all crab species was estimated using three pitfall traps at 50-meter intervals along four transect lines parallel to the shoreline. Benthic invertebrate abundance and both native shore crab species were measured along the four transects. In April of each year, a total of six core samples were taken at 20-meter intervals along these transects for both Nutricola species. The same method was used to estimate changes in selected invertebrates at other sites in BBH.

Temporal Representation:

The time period, unless otherwise specified is from 1989-1998, excluding 1992. Abundance of all crab species was estimated annually in late May to early June. Actual density of green crabs was estimated visually 2-4 times annually from 1994-1996. Invertebrate abundance was measured annually. Abundance for both native shore crab species was measured during April of each year. The same time period was used to estimate changes in selected invertebrates at other sites in BBH, and for 13 species of wintering shorebirds. For the shorebirds, data were collected three times annually (Aug 15 to Sept 30, Nov 15 to Dec 31, and Jan 15 to Feb 28).

Environmental Conditions:

Changes in relative diversity and abundance of native species may also be driven by habitat alteration, flow changes, or hydro-modification.

Data Quality Assessment:

Peer Reviewed Journal Article.

Line of Evidence

Population/Community Degradation

Beneficial Use

MA - Marine Habitat

Non-Numeric Objective:

All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Water Board will determine compliance with this objective.

Data Used to Assess Water

Quality:

The non-native European green crab was first reported in 1989-90 from San Francisco Bay and had spread to Bodega Bay by 1993. A predatory non-native New Zealand sea slug was collected in San Francisco Bay in 1992 and is now found from San Diego to Bodega Harbor (Cohen, A.N. 1997).

Water Segment: Eureka Plain HU, Humboldt Bay

Pollutant: Dioxin Compounds

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to access this pollutant.

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

Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirement of section 6.1.5 of the Policy.

3. Fourteen of 29 samples in the northern and southern bay sections exceeded the OEHHA Screening value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

SWRCB Staff Recommendation:

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

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat

Matrix: Tissue

Water Quality Objective/ North Coast RWQCB Basin Plan. All waters shall be maintained free of toxic substances in concentrations that a re toxic to, or that produce

toxic substances in concentrations that a re toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic

life.

Evaluation Guideline: 3ng/kg OEHHA Screening Value.

Data Used to Assess Water Fourteen out of 2

Quality:

Fourteen out of 29 samples exceeded the screening value. Crab, mussel, oyster and sculpin samples were taken in the North and South Bays from

3/24/02 to 10/25/02. (Smith, 2006).

Spatial Representation: Two sample location (Lappe S2) in the southern section of the bay, south of the mouth and 12 samples in the northern section of Humboldt Bay.

Some samples taken in close proximity were averaged (pursuant to

Section 6.1.5.2 of the Policy).

Temporal Representation: Samples were taken from 3/24/02 to 10/25/02.

Data Quality Assessment: Sierra Pacific Industries Humboldt Bay.

Water Segment: Klamath River HU, Lower HA, Klamath Glen HSA

Pollutant: Sedimentation/Siltation

Decision: List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Two of these lines of evidence support placing this water body segment on the section 303(d) list. The narrative information, photos and study findings submitted supports the numerical information submitted in concluding that a sedimentation problem exists in this water body.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. There are 8 weekly averages out of 31 weeks of 7 consecutive day averages that exceeded the evaluation guideline for turbidity and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
- 5. It is uncertain if these sampling locations are on tribal land. The State Water Board found at its October 25, 2006 meeting that this water body and pollutant be placed on the section 303(d) list and that USEPA should make a determination if this listing should remain on the California Section 303(d) list. It is not the State Water Board's intent that this listing affect actions related to decommissioning and removal of dams on the Klamath River.

# SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list. State Water Board found that USEPA examine jurisdictional issues.

#### Lines of Evidence:

Numeric Line of Evidence

Pollutant-Water

Beneficial Use:

CO - Cold Freshwater Habitat

Matrix:

Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. Turbidity shall not be increased more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof. Water shall not contain substances in concentrations that result in deposition of material that causes nuisance or adversely affect beneficial uses.

Evaluation Guideline:

The evaluation guideline that has been used to help determine exceedance is from published-peer reviewed paper, Noggle (1978, cited in Meehan, 1991) reported that suspended sediment concentrations of 300 mg/L caused reduced growth and feeding.

Data Used to Assess Water Quality:

When you consider the entire data set from the three creeks sampling locations the data only shows one exceedance of the evaluation guideline out of the 21 samples taken. The one Suspended Sediment Concentration (SSC) exceedance that was shown was on 12/14/02 at 12:45 at McGarvey Creek and the SSC was 307 mg/L. The other samples taken at McGarvey had an average of 231.5 mg/L for 12/14/02, 117 for the 1/13/03 Avg., and 8.39 mg/L for the April 2003 Avg. The Blue Creek location had an SSC average 5.05 mg/L for 4/28/03 and 9.97 mg/L average for samples taken on 12/9/03. The Turwar Creek only had samples on 4/29/03 with and average SSC of 3.46 mg/L (Yurok Tribe, 2003).

Spatial Representation:

Three sampling locations; Blue Creek, McGarvey Creek and Turwar Creek gauging stations are located in the Lower Klamath River Basin.

Temporal Representation:

The data were collected from only 6 days from 4 different months between 12/2002 and 12/2003. SSC Data was collected from the McGarvey Creek station on 12/14/02, 1/13/03, 4/4/03, and 4/30/03. Data were collected from this location between 12:28 pm and 13:45 pm on each of the respective sampling dates. SSC Data was collected from the Blue Creek Sampling location on 4/28/03 and 12/9/03. Data was collected from this location between 12:28pm on 4/28/03 and between 14:50 and 15:15pm on 12/29/03. SSC Data was collected from the Turwar location on 4/29/03 only between 12:00 and 12:20 pm.

Environmental Conditions:

Regional Water Board staff have long suggested that beneficial uses may be impaired in portions of the mainstem Klamath (particularly in the lower Klamath River) and tributaries to the Klamath River (Beaver Creek and tributaries to the Klamath below the confluence with the Trinity River have been specifically identified) due to excessive sediment loading and instream sediment conditions. Insufficient information was available in 2002 to make a listing determination.

The Yurok Indian Reservation boundaries lie approximately one mile on either side of the Klamath River from the Pacific Ocean to the confluence with the Trinity River. The Yurok, Karuk, and Hoopa Tribes are very

active throughout the Klamath basin in both fisheries and water quality monitoring efforts. The Yurok and Hoopa Tribe are actively pursuing approval of Clean Water Act authority from US EPA. Coordination among the Regional Water Board, State Water Board, the Tribes and US EPA is critical to successful development and implementation of TMDLs for the Klamath River basin.

Data Quality Assessment:

"Sampling and Analysis Plan for the Yurok Reservation, May 2003." This plan includes the tribe's data quality objectives, sampling rationales and procedures, field methods and procedures, sample preservation and storage and quality control information. They also included Appendix-C of that plan in their submittal, which is their "Draft Water Quality Control Plan for the Yurok Indian Reservation, January 2003". These documents have been submitted to USEPA for approval.

Numeric Line of Evidence

Pollutant-Water

Beneficial Use:

CO - Cold Freshwater Habitat

Matrix:

Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. Turbidity shall not be increased more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof. Water shall not contain substances in concentrations that result in deposition of material that causes nuisance or adversely affect beneficial uses.

Evaluation Guideline:

The evaluation guideline that has been used to determine turbidity exceedance is from published-peer reviewed paper, "The Effects of Chronic Turbidity on Density and Growth of Steelheads and Coho Salmon", John W Sigler (1984). The guideline is "In our studies, as little as 25 NTUs of turbidity caused a reduction in fish growth."

Data Used to Assess Water Quality:

Blue Creek: Nine weekly sample averages with 2 of those weeks with an average of 29.73 NTU and 223.36 NTU respectively, that were both in exceedance of the turbidity evaluation guideline. The other 7 weekly averages for the Blue Creek sampling location were below the 25 NTU guideline with a range of averages between 1.02 NTU and 13.16 NTU. Turwar Creek: Thirteen weekly sample averages with 1 of those weeks with an average of 136.88 NTU in exceedance of the turbidity evaluation guideline. The other 12 weekly averages for the Blue Creek sampling location were below the 25 NTU guideline with a range of averages between 0.40 NTU and 19.25 NTU.

McGarvey Creek: Nine weekly samples averages with 5 of those weeks with averages of 25.31 NTU, 54.79 NTU, 69.03 NTU, 36.36 NTU, and 26.82 NTU respectively, that were all in exceedance of the turbidity evaluation guideline. The other 4 weekly samples averages that were below the 25 NTU guideline with a range of averages between 5.24 NTU and 19.13 NTU.

These measurements considered collectively, there are 31 weeks of 7 consecutive days averages- over three locations with 8 of those weekly averages in exceedance of the 25 NTU evaluation guideline for turbidity (Yurok Tribe, 2003).

Spatial Representation: Three sampling locations; Blue Creek, McGarvey Creek and Turwar

Creek gauging stations are within their respective watersheds within the

located on the Lower Klamath River Basin.

Temporal Representation: At the three sampling locations, turbidity data and stage feet data were

collected every 15 minutes, over a 24 hour period, every day. Blue Station- Data was collected from 10/1/03 through 1/29/04. McGarvey Station- Data was collected from 10/1/03 through 2/3/04. Turwar Station-Data was collected from 10/1/03 through 1/5/04. Turbidity data and Stage

feet data were collected.

Environmental Conditions: Regional Water Board staff have long suggested that beneficial uses

may be impaired in portions of the mainstem Klamath (particularly in the lower Klamath River) and tributaries to the Klamath River (Beaver Creek and tributaries to the Klamath below the confluence with the Trinity River have been specifically identified) due to excessive sediment loading and instream sediment conditions. Insufficient information was available in

2002 to make a listing determination.

The Yurok Indian Reservation boundaries lie approximately one mile on either side of the Klamath River from the Pacific Ocean to the confluence with the Trinity River. The Yurok, Karuk, and Hoopa Tribes are very active throughout the Klamath basin in both fisheries and water quality monitoring efforts. The Yurok and Hoopa Tribe are actively pursuing approval of Clean Water Act authority from US EPA. Coordination among the Regional Water Board, State Water Board, the Tribes and US EPA is critical to successful development and implementation of TMDLs for the

Klamath River basin.

Data Quality Assessment: "Sampling and Analysis Plan for the Yurok Reservation, May 2003". This

plan includes the tribe's data quality objectives, sampling rationales and procedures, field methods and procedures, sample preservation and storage and quality control information. They also included Appendix-C of that plan in their submittal, which is their "Draft Water Quality Control Plan for the Yurok Indian Reservation, January 2003". These documents

have been submitted to USEPA for approval.

Line of Evidence

Visual

Beneficial Use

CO - Cold Freshwater Habitat

Information Used to Assess Water Quality:

Photographs show the Lower Klamath River in 1998, looking upstream from the Highway 101 Bridge. Sediment deposits in the margins show sediment accumulated. A second plate shows watershed conditions and land use management in lower Blue Creek contributes to sediment yields. High road densities contribute chronic fine sediment to Blue Creek and other Lower Klamath tributaries. Road failures during storm events may also lead to larger yields, which aggraded stream beds to the point where surface flows are sometimes lost. In this photograph, Blue Creek remains on the surface, but the lower creek is widened by sediment. An aerial photo shows tracks of debris torrents in Walker Creek, which buried the stream channel and extended all the way to the mainstem Klamath River. A photo at the mouth of Elk Creek shows the delta extending to the edge of the photo was aggraded more than ten feet after the January 1997 storm. A photo of the mainstern Scott River stream bed below Jones Beach has a high amount of decomposed granite sand, contributed from upland. This sand also makes its way into the Klamath River.

Non-Numeric Objective:

Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. Turbidity shall not be increased more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof. Water shall not contain substances in concentrations that result in deposition of material that causes nuisance or adversely affect beneficial uses.

Data Used to Assess Water Quality:

The Long Range Plan for the Klamath River Basin Fishery Conservation Area Restoration Program (Kier Associates, 1991), presents considerable evidence that the mainstem Klamath River is impacted by sediment. With regard to the Lower Klamath Basin, the Long Range Plan noted huge contributions of sediment from tributaries. Contributed sediment is creating problems with fish passage and stream bed stability, and for the lower mainstem: Payne and Associates (1989) found that stream-mouth deltas, almost nonexistent prior to 1955, have grown to 500 and 700 feet in width since 1964. Delta widths changed dramatically after the 1964 flood, but increased even more after the high water of 1972. The initial incursion of sediment came with the 1964 flood but is still being delivered to the lower reaches of the streams. Streambed conditions near the mouths were found by Payne and Associates (1989) to be so unstable that no fish ways could be installed and the study concluded that no lasting solution, other than natural recovery, was possible. Logging in many of these drainages continues today. This delays their recovery and, according to Coats and Miller (1981), could lead to substantial new sediment loads in the event of a major flood. Voight and Gale (1998) noted that 17 of 23 tributaries to the Lower Klamath River remained underground, indicating lack of recovery and continuing contributions of sediment. The Long Range Plan (Kier Assoc., 1991) cites longer term sediment impacts noted by CalTrans (1989):

These stream sections (Lower Klamath) are thought to be in an aggraded condition: the Klamath River is reportedly aggrading at the rate of 100,000 to 150,000 cubic yards per year in the proposed reach while Turwar Creek has shown "substantial aggradations in the channel" over the last thirty years. The stream flow goes subsurface during the summer and early fall, posing a barrier to upstream migrants in the fall (CalTrans, 1989).

The Long Range Plan (Kier Associates, 1991) also made the case that the near extinction of the eulachon or candlefish (Larson and Belchik, 1998), a lower mainstem Klamath River spawner, was indicative of major problems with sediment supply, size and bed load movement.

The mid-term evaluation of the Klamath River Basin Fisheries Restoration Program (Kier Assoc., 1999) evaluated changes in the health of the Klamath River and its tributaries between the inception of the program in 1989 and 1998. They found evidence of continued sediment contributions from logging in the Lower Klamath basin, but also major pulses associated with the January 1997 storm in reaches further upstream. With regard to the Lower Klamath, Kier Associates (1999) found:

Channels of most Lower Klamath tributaries have continued to fill in as

sediment yield in the watersheds remains high. Timber harvest in all Lower Klamath watersheds exceeds cumulative effect thresholds and all streams (except upper Blue Creek) have been severely damaged during the evaluation period. Clear-cut timber harvest in riparian zones on the mainstem of lower Blue Creek and the mainstem Klamath River occurred since 1988 in inner gorge locations. Aggradations in salmon spawning reaches can be expected to persist for decades. Aggradations in salmon spawning reaches can be expected to persist for decades (Higgins, 2004).

Water Segment: Mendocino Coast HU, Noyo River HA, Noyo River

Pollutant: Temperature, water

**Decision:** List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess temperature consistent with Listing Policy section 6.1.5.9. This decision is applicable to the area covering the sampling locations located on the mainstem Noyo River at the confluence of Duffy Gulch downstream to the confluence of Hayshed Gulch; down the South Fork Noyo River to the confluence of Kass Creek; on Hayshed Gulch at station NOY8; on Kass Creek at station NOY7; on the Little North Fork Noyo River at station NOY5; and Duffy Gulch at station NOY2. A large number of samples exceed the water quality objective. When compared to the 14.8°C threshold, were 3,376 exceedances out of 7,743 samples taken over all the sampling years at this location. When compared to the 17°C threshold there were 1,185 exceedances found out of all of the data.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. There were 3,376 of 7,743 samples that exceeded the 14.8 degree evaluation guideline used to interpret the water quality objective and this exceeds the allowable frequency calculated from the equation in Table 3.2 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

# SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. This listing only applies to the following areas of the Noyo River watershed:----The Noyo River mainstem from the confluence of Duffy Gulch downstream to the confluence with Hayshed Gulch;----The South Fork Noyo River mainstem from the confluence of Kass Creek downstream to the confluence with Noyo River mainstem; and ----The Little North Fork Noyo River, Duffy Gulch, and Kass Creek tributaries.

#### Lines of Evidence:

Numeric Line of Evidence

Pollutant-Water

Beneficial Use:

CO - Cold Freshwater Habitat

Matrix:

Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: Temperature objectives for COLD interstate waters, WARM interstate waters, and Enclosed Bays and Estuaries are as specified in the "Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays of California" including any revisions thereto. A copy of this plan is included verbatim in the Appendix Section of the Regional Board's Basin Plan. In addition, the following temperature objectives apply to surface waters: The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased by more than 5°F above natural receiving water temperature. At no time or place shall the temperature of WARM intrastate waters be increased more than 5°F above natural receiving water temperature.

Evaluation Guideline:

The guideline used was from Sullivan et al. (2000) Published Temperature Thresholds-Peer Reviewed Literature which includes reviewed sub-lethal and acute temperature thresholds from a wide range of studies, incorporating information from laboratory-based research, field observations, and risk assessment approaches. This report calculated the 7-day mean (maximum value of the 7-day moving average of the daily mean temperature) upper threshold criterion for Coho salmon as 14.8°C and for steelhead trout as 17.0°C. The risk assessment approach used by Sullivan et al. (2000) suggests that an upper threshold for the 7-day average of 14.8°C for Coho and 17.0°C for steelhead will reduce average growth 10% from optimum.

Data Used to Assess Water Quality:

When compared to the 14.8°C Coho threshold, there were 3,376 exceedances out of 7,743 total samples taken over all the sampling years at the sampling locations on the Noyo River. When compared to the 17°C threshold there were 1,185 exceedances found out of all of the data (Hawthorne Timber Co., 2003).

Spatial Representation:

The sampling locations: NOY8 was on Hayshed Gulch near the confluence to the main stem Noyo River (MNR), NOY9 was at the confluence of Hayshed Gulch and the MNR, NOY12 was at the confluence of the main stem and S.F. Noyo River (SFNR), NOY7 was on Kass Creek near the confluence to the SFNR, NOY5 was on the Little N.F. Noyo River (LNFNR), NOY4 was on the MNR, just upstream of the confluence with the LNFNR, NOY13 and NOY14 are on the MNR upstream of NOY4, NOY2 is on Duffy Gulch just upstream of the confluence with the MNR, and NOY11 is on the MNR just upstream of the confluence with Duffy Gulch.

In summary, the areas of the Noyo River watershed covered by these sample sites are:----The Noyo River mainstem from the confluence of Duffy Gulch downstream to the confluence with Hayshed Gulch;----The South Fork Noyo River mainstem from the confluence of Kass Creek downstream to the confluence with Noyo River mainstem; and ----The

Little North Fork Noyo River, Duffy Gulch, and Kass Creek tributaries. Hobo-Temps were placed in the pools near the bottom and towards the deepest portion to record the in-stream temperatures. In stream and riparian measurements were taken at all monitoring locations.

Temporal Representation:

There were samples taken in 1994, 1997, 1998, 1999, 2000, 2001, 2002, and 2003. Water temperature data were recorded at ninety-minute intervals, generally from June until Mid-October. Stream temperatures were measured continuously with temperature data loggers (Onset Computer Corp. model HOBO-Temp and OST temperature loggers) in Class 1 streams throughout the property from 1994 to 2003. Hobo-temps allowed uninterrupted data collection to occur throughout the critical summer period.

Data Quality Assessment:

QA/QC Information Summary was submitted. Installation of the temperature data logger (Onset Computer Corp. model HOBO-Temp and OST temperature loggers in Class 1 streams throughout the property devices occurred one day before the first day logged on the continuous temperature monitoring figures. This was done to allow the data loggers to reach equilibrium with the in stream temperature regimes and to capture complete daily cycles. No information on equipment calibration, standard operating procedures or data protocols were included with the submittal.

Water Segment: Russian River HU, Lower Russian River HA, Guerneville HSA

Pollutant: pH

Decision: List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Six out of 27 samples did not meet the minimum of the pH water quality objective of 6.5.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. There were 6 out of the 27 samples that exceeded the pH water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: pH for Russian River shall not be depressed below 6.5 nor raised above 8.5. Changes in normal ambient pH levels shall not exceed 0.2 units in waters with designated marine (MAR) or saline (SAL) beneficial uses nor 0.5 units within the range specified above in fresh waters with designated COLD or WARM beneficial uses.

Data Used to Assess Water

Quality:

Six out of 27 samples did not meet the minimum of the objective. The samples below 6.5 ranged from 6 to 6.4 (Sandler, 2004).

Spatial Representation: Sampling was done in Pocket (Canyon) Creek a tributary to the lower

Russian River within the greater Guerneville HSA. PCC020 is located in Guerneville, at 12170 Hwy 116, downstream of Inn and the tank in the creek. PCC030 is located in Guerneville, at 11900 Hwy 116, in the backyard. PCC040 is located in Guerneville, 50 feet upstream from bridge along Hwy 116 at May's Canyon Road. This listing should be focused on Pocket Canyon Creek because sampling was limited to Pocket Creek a tributary to the lower Russian River within the greater

Guerneville HSA.

Temporal Representation: Samples were taken at all 3 sites once a month on the same days in

January, February, March, May, and August through December 2003.

Data Quality Assessment: Draft QAPP for Volunteer Water Quality Monitoring Project for the

Community Clean Water Institute.

Water Segment: Trinity River HU, Upper HA, Trinity River, East Fork

Pollutant: Mercury

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. Two lines of evidence are available in

the administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three of the 137 samples exceeded the OEHHA Screening Value and there is a fish consumption advisory in place in this water body for this pollutant.

4. Pursuant to section 3.4 of the Listing Policy, water segment-specific data are available indicating the evaluation guideline for tissue is exceeded.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and there

is a health advisory in this water body for this pollutant.

#### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: North Coast RWQCB Water Quality Control Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or

that produce detrimental physiological responses in human, plant,

animal, or aquatic life.

Evaluation Guideline: 0.3 µg/g (OEHHA Screening Value).

Data Used to Assess Water

Quality:

Three out of 137 samples exceeded (NRDC, 2006).

Spatial Representation: One exceeding sample was taken 1.2 miles below Devil's Creek. Another

exceeding sample was taken below Altoona Mine Drain. The third sample was taken below County Road 106, near Trinity Center.

Temporal Representation: Samples were collected between 9/11/2000 and 8/14/2002.

Data Quality Assessment: USGS

Line of Evidence Health Advisories

Beneficial Use CM - Commercial and Sport Fishing (CA)

Information Used to Assess

Water Quality:

A fish consumption advisory has been established for mercury in Trinity County. The advisory was established by the Office of Environmental

Health Hazard Assessment.

Evaluation Guideline: A fish consumption advisory has been established for mercury in Trinity

County. The advisory was established by the Office of Environmental

Health Hazard Assessment.

# North Coast Region (1)

# LIST AS BENGADORESED

Recommendations to place waters and pollutants on the Being Addressed category of the section 303(d) List

Water Segment: Bodega HU, Estero de San Antonio HA, Stemple Creek/Estero do San

Antonio

Pollutant: Nutrients

**Decision:** List in Being Addressed Category

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use CO - Cold Freshwater Habitat

Data Used to Assess Water

Quality:

The Stemple Creek Nutrients and Sediment TMDL was approved by the

RWQCB in 1997 and subsequently approved by USEPA.

Water Segment: Bodega HU, Estero de San Antonio HA, Stemple Creek/Estero do San

Antonio

Pollutant: Sediment

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

Data Used to Assess Water

Quality:

The Stemple Creek Nutrients and Sediment TMDL was approved by the

RWQCB in 1997 and subsequently approved by USEPA.

Water Segment: Cape Mendocino HU, Mattole River HA, Mattole River

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water

segment-pollutant combination. The Mattole River Sediment TMDL was approved by RWQCB in November of 2004 and subsequently approved

by USEPA.

Water Segment: Eel River HU, Middle Fork HA

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Middle Fork Eel River Sediment

TMDL was approved by RWQCB in November of 2004 and subsequently

approved by USEPA.

Water Segment: Eel River HU, North Fork HA

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Eel River North Fork Sediment

TMDL was approved by RWQCB in November of 2003 and subsequently

approved by USEPA.

Water Segment: Eel River HU, South Fork HA

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Eel River South Fork Sediment

TMDL was approved by RWQCB in November of 2004 and subsequently

approved by USEPA.

Water Segment: Eel River HU, Van Duzen River HA

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Van Duzen Sediment TMDL was

approved by RWQCB in November of 2004 and subsequently approved

Water Segment: Klamath River HU, Salmon River HA

Pollutant: Temperature, water

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Salmon River Temperature TMDL

was adopted by RWQCB in June of 2005 and subsequently approved by

USEPA.

Water Segment: Klamath River HU, Scott River HA

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use CO - Cold Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Scott River Sediment and

Temperature TMDL was adopted by RWQCB on 12/7/2005 and

approved by USEPA on 9/8/2006.

Water Segment: Klamath River HU, Scott River HA

**Pollutant:** Temperature, water

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

Data Used to Assess Water A

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Scott River Sediment and

Temperature TMDL was approved by RWQCB in December of 2005 and

subsequently approved by USEPA.

Water Segment: Mendocino Coast HU, Albion River HA, Albion River

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

Data Used to Assess Water A TMDL and

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. Albion River Sediment TMDL was

approved by RWQCB in March of 2002 and subsequently approved by

USEPA.

Water Segment: Mendocino Coast HU, Big River HA, Big River

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Big River Sediment TMDL was

approved by RWQCB in November of 2004 and subsequently approved

Mendocino Coast HU, Garcia River HA, Garcia River **Water Segment:** 

Sediment Pollutant:

Decision: List in Being Addressed Category

This pollutant is being considered for listing under section 2.2 of the Listing Weight of Evidence:

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the

section 303(d) list during the 2002 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

**SWRCB Staff** Recommendation: After review of the available data and information for this recommendation, SWRCB staff concludes that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

### Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use CO - Cold Freshwater Habitat

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Garcia River Sediment TMDL was approved by USEPA in March 2002.

The Garcia River was listed for sediment in 1992. The TMDL was adopted as a Basin Plan amendment by the NCRWQCB and approved by the SWRCB and USEPA. The Garcia Sediment TMDL document indicates that impairments will persist for decades, even in the

eventuality that all responsible landowners implement aggressive erosion

control measures (North Coast RWQCB, 2004a).

Water Segment: Mendocino Coast HU, Gualala River HA, Gualala River

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water

segment-pollutant combination. The Gualala River Sediment TMDL was approved by RWQCB in November of 2004 and subsequently approved

Water Segment: Mendocino Coast HU, Navarro River HA

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water

segment-pollutant combination. The Navarro River Sediment TMDL was approved by RWQCB in November of 2004 and subsequently approved

Water Segment: Mendocino Coast HU, Navarro River HA, Delta

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Navarro River Sediment TMDL was

approved by RWQCB in November of 2004 and subsequently approved

Water Segment: Mendocino Coast HU, Noyo River HA, Noyo River

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Noyo River Sediment TMDL was

approved by RWQCB in November of 2004 and subsequently approved

Water Segment: Mendocino Coast HU, Rockport HA, Ten Mile River HSA

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list in the Water Quality Limited Segments Being Addressed category

because a TMDL and implementation plan has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Ten Mile River Sediment TMDL was

approved by RWQCB in November of 2004 and subsequently approved

Water Segment: Redwood Creek HU, Redwood Creek

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use CO - Cold Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Redwood Creek Sediment TMDL

was approved by RWQCB in November of 2004 and subsequently

approved by USEPA.

Water Segment: Trinity River HU, Lower Trinity HA

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Trinity River Sediment TMDL was

approved by RWQCB in November of 2004 and subsequently approved

Water Segment: Trinity River HU, Middle HA

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

Deficial Use CO - Colu Flestiwater Habit

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Trinity River Sediment TMDL was approved by RWQCB in November of 2004 and subsequently approved

Water Segment: Trinity River HU, South Fork HA

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

Data Used to Assess Water A TMDL

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Trinity River Sediment TMDL was

approved by RWQCB in November of 2004 and subsequently approved

Water Segment: Trinity River HU, Upper HA

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Trinity River Sediment TMDL was

approved by RWQCB in November of 2004 and subsequently approved

Water Segment: Trinity River HU, Upper HA, Trinity River, East Fork

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

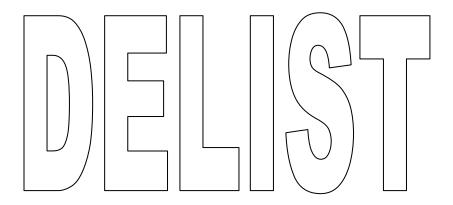
Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Trinity River Sediment TMDL was approved by RWQCB in November of 2004 and subsequently approved

# North Coast Region (1)



Recommendations to remove waters and pollutants from the section 303(d) List

Water Segment: Klamath River HU, Lost River HA, Tule Lake and Mt Dome HSAs

Pollutant: Temperature, water

**Decision:** Delist

Weight of Evidence: Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that the original listing recommendation is faulty due to the lack of

data. There was no site specific data or information to support the

temperature listing for this water body.

SWRCB Staff Recommendation:

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

exceeded and this water body was originally listed for this pollutant in error.

Lines of Evidence:

Line of Evidence Narrative Description Data

Beneficial Use WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

There was no site specific data or information to support the temperature listing for this water body. EPA's temperature listings for North Coast rivers in 1992 were based on evidence of salmonid habitat degradation due to elevated temperature conditions that did not specifically reference impairments in this water body. As this water body does not support salmonid habitat and the 1992 listing record does not support a finding of temperature impairment, this listing was in error. Review of the recent temperature data for this water body indicates there is insufficient

evidence of temperature impairment to support this listing.

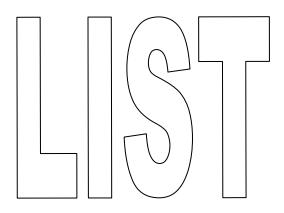
Page left blank intentionally.

# North Coast Region (1)

# Original Fact Sheets

Fact Sheets Not Changed from September 2005 Version

# North Coast Region (1)



Recommendations to place waters and pollutants on the section 303(d) List

Water Segment: Clair Engle Lake

Pollutant: Mercury

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Eleven of the 50 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

pollutant contributes to or causes the problem.

### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: North Coast RWQCB Water Quality Control Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or

that produce detrimental physiological responses in human, plant,

animal, or aquatic life.

Evaluation Guideline: 0.3 μg/g (OEHHA Screening Value).

Data Used to Assess Water

Quality:

Eleven out of 50 samples exceeded. Filet composite and individual samples were collected. Species collected were brown trout, rainbow

trout, chinook salmon, largemouth bass, smallmouth bass, and white catfish. Two individual samples of chinook salmon, 8 individual samples of smallmouth bass, and 1 composite of smallmouth bass exceeded the

guideline (TSMP, 2002).

Spatial Representation: One station located along the east fork of the lake.

Temporal Representation: Samples were collected in 9/24/2002, 9/25/2002, and 9/27/2002.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002, Department of Fish and Game. Data Quality Assessment:

Water Segment: Mendocino Coast HU, Albion River HA, Albion River

Pollutant: Temperature, water

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3 of the Listing Policy. Under section 3 a single line of evidence

is necessary to assess listing status.

One line of evidence is available in the administrative record to assess temperature consistent with Listing Policy section 6.1.5.9. A large number of samples exceed the water quality objective. When compared to the 14.8 °C coho threshold, the sampling locations had a total of 342 measurements of which 245 exceeded the 14.8 °C evaluation guideline.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. There were 245 of 342 samples that exceeded the 14.8 °C evaluation guideline used to interpret the temperature water quality objective and this exceeds the allowable frequency calculated from the equation in Table 3.2 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: Temperature objectives for COLD interstate waters, WARM interstate waters, and Enclosed Bays and Estuaries are as specified in the "Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays of California" including any revisions thereto. A copy of this plan is included verbatim in the Appendix

Section of this Plan. In addition, the following temperature objectives apply to surface waters: The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased by more than 5°F above natural receiving water temperature. At no time or place shall the temperature of WARM intrastate waters be increased more than 5°F above natural receiving water temperature.

Evaluation Guideline:

The guideline used was from Sullivan et al. (2000) Published Temperature Thresholds-Peer Reviewed Literature which includes reviewed sub-lethal and acute temperature thresholds from a wide range of studies, incorporating information from laboratory-based research, field observations, and risk assessment approaches. This report calculated the 7-day mean (maximum value of the 7-day moving average of the daily mean temperature) upper threshold criterion for coho salmon as 14.8°C and for steelhead trout as 17.0°C. The risk assessment approach used by Sullivan et al. (2000) suggests that an upper threshold for the 7-day average of 14.8°C for coho and 17.0°C for steelhead will reduce average growth 10% from optimum.

Data Used to Assess Water Quality:

The Albion River was sampled at Flynn Creek Road and below Railroad Gulch; and at Marsh Gulch at Flynn Creek Road. There were a total of 342 7-day average water temperature measurements taken at 3 separate locations. Of these, 245 measurements of 342 were in exceedance of the 14.8°C guideline for coho and 106 of the 342 exceeded the 17.0°C evaluation guideline for steelhead (Mendocino County Water Agency, 2003). Data were collected hourly from 5/23/2003 to 9/7/2003.

Spatial Representation:

There were three sampling locations: The Albion River at Flynn Creek Road; Albion River below Railroad Gulch; and Marsh Gulch at Flynn Creek Road.

Temporal Representation:

Temperature data was collected hourly at each of the three sampling locations between May 23, 2003 and September 7, 2003.

Data Quality Assessment:

No QAPP was provided. The data was collected from the Mendocino County Water Agency.

Water Segment: Mendocino Coast HU, Noyo River HA, Pudding Creek

Pollutant: Temperature, water

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3 of the Listing Policy. Under section 3 a single line of evidence

is necessary to assess listing status.

One line of evidence is available in the administrative record to assess temperature consistent with Listing Policy section 6.1.5.9. When compared to the 14.8°C coho threshold, there were 289 exceedances out of 1,391 total samples taken over all the sampling years in the middle to upper watershed of Pudding Creek. When compared to the 17°C steelhead threshold there were no exceedances found for any of the data.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. There were 289 of 1,391 samples that exceeded the Sullivan 14.8 degree evaluation guideline used to interpret the water quality objective and this exceeds the allowable frequency calculated from the equation in Table 3.2 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

## SWRCB Staff Recommendation:

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

### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: Temperature objectives for COLD interstate waters, WARM interstate waters, and Enclosed Bays and Estuaries are as specified in the "Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays of California" including any

revisions thereto. A copy of this plan is included verbatim in the Appendix Section of this Plan. In addition, the following temperature objectives apply to surface waters: The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased by more than 5°F above natural receiving water temperature. At no time or place shall the temperature of WARM intrastate waters be increased more than 5°F above natural receiving water temperature.

Evaluation Guideline:

The guideline used was from Sullivan et al. (2000) Published Temperature Thresholds-Peer Reviewed Literature which includes reviewed sub-lethal and acute temperature thresholds from a wide range of studies, incorporating information from laboratory-based research, field observations, and risk assessment approaches. This report calculated the 7-day mean (maximum value of the 7-day moving average of the daily mean temperature) upper threshold criterion for coho salmon as 14.8°C and for steelhead trout as 17.0°C. The risk assessment approach used by Sullivan et al. (2000) suggests that an upper threshold for the 7-day average of 14.8°C for coho and 17.0°C for steelhead will reduce average growth 10% from optimum.

Data Used to Assess Water Quality:

When compared to the 14.8 °C coho threshold, there were 289 exceedances out of 1391 total samples taken over all of the years at this location. When compared to the 17°C threshold there were no exceedances found for any of the data (Hawthorne Timber Co., 2003).

Spatial Representation:

There were 1,391 total samples taken at the middle to upper watershed of Pudding Creek. Hobo-Temps were placed in the pools near the bottom and towards the deepest portion to record the in-stream temperatures. In stream and riparian measurements were taken at all monitoring locations on Pudding Creek.

Temporal Representation:

Samples were recorded for 9 years between 1994 and 2001 and again in 2003. Water temperature data were recorded at 90-minute intervals, generally from June until Mid-October upstream temperatures were measured continuously with temperature data loggers (Onset Computer Corp. model HOBO-Temp and OST temperature loggers) in Class 1 streams throughout the property from 1994 to 2004. Hobo-temps allowed uninterrupted data collection to occur throughout the critical summer period.

Data Quality Assessment:

QA/QC Information Summary was submitted. Installation of the temperature data logger (Onset Computer Corp. model HOBO-Temp and OST temperature loggers in Class 1 streams throughout the property devices occurred one day before the first day logged on the continuous temperature monitoring figures. This was done to allow the data loggers to reach equilibrium with the instream temperature regimes and to capture complete daily cycles. No information on equipment calibration, standard operating procedures or data protocols were included with the submittal.

Water Segment: Russian River HU, Middle Russian River HA, Big Sulphur Creek HSA

Pollutant: Specific Conductance

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the

administrative record to assess this pollutant.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Five months of the 7 months of samples exceeded the specific conductance water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.

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

SWRCB Staff Recommendation:

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

### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: Specific conductance- 50% upper and lower limits of 250 micromhos represent the 50 percentile values of the monthly means for a calendar year. 50% or more of the monthly means must be less than or equal to an upper limit and greater than or equal to a lower limit. 90% upper and lower limits of 320 micromhos represent the 90 percentile values for a calendar year. 90% or more of the values must be less than or equal to an upper limit and greater than or equal to a lower limit.

Data Used to Assess Water Quality:

There was one sample taken on one day of each month for 7 months in 2003. Five months out of 7 months samples were above the 50% upper limit of 250 micromhos. No samples taken were above the 90% upper limit of 320 micromhos (Sandler, 2004).

There was one sampling location, BSC010 that is located upstream of Laguna de Santa Rosa, 20 feet below River Rd. Bridge. Spatial Representation:

Samples were taken once a month, January through August 2003 with Temporal Representation:

no samples taken in June.

Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute. Data Quality Assessment:

Water Segment: Russian River HU, Middle Russian River HA, Laguna de Santa Rosa

Pollutant: Mercury

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three out of 17 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

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

life.

Evaluation Guideline: 0.3 µg/g (OEHHA Screening Value)

Data Used to Assess Water Quality:

Three out of 17 samples exceeded. Individual and composite filet samples of the following species were collected: black bullhead, bluegill, carp, channel catfish, green sunfish, redear sunfish, Sacramento blackfish, and sucker. Samples were collected from 1996-2000. One 1996 (Stony Point) individual green sunfish sample, one 1999 (Stony Point) composite green sunfish sample, and one 2000 (Occidental Pond) individual bluegill sample exceeded the guideline (TSMP, 2002).

Spatial Representation: Three stations were sampled: upstream of Occidental Road (Occidental

Pond), adjacent to the sewage treatment plant in Sebastopol (Sebastopol

Pond), and Laguna de Santa Rosa at Stony Point Road (Stony Point).

Temporal Representation: Samples were collected 1996-2000.

Data Quality Assessment:

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000, Department of Fish

and Game.

# North Coast Region (1)

Recommendations to remove waters and pollutants from the section 303(d) List

Water Segment: Klamath River HU, Lost River HA, Clear Lake, Boles HSAs

Pollutant: Nutrients

Decision: Delist

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

Five lines of evidence are available in the administrative record to assess this pollutant. There is no evidence that the biostimulatory narrative objective is exceeded. The NCWRQCB Staff summary of the Upper Lost River De-Listing Recommendation along with the TMDL Analysis Staff Report support the decision to remove nutrients from the 303(d) List for this water segment.

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

This conclusion is based on the staff findings that:

- 1. The sediment quality guideline used complies, with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. The results of the nutrient analysis on the nitrogen, chlorophyll-a, phosphorus samples show that there is no evidence that the biostimulatory narrative objective has been exceeded. The dissolved oxygen samples show that the lowest values sampled are still above the minimum objective. These results do not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

### Lines of Evidence:

Numeric Line of Evidence Pollutant-Nuisance

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Basin Plan: Water shall not contain bio-stimulatory substances in

Water Quality Criterion:

concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.

Evaluation Guideline:

The Bio-stimulatory WQO is inclusive of nutrients.

Data Used to Assess Water Quality:

The TMDL Analysis was completed for Upper Lost River and Clear Lake Reservoir Watershed. The Chlorophyll-a in the water column was measured from monthly grab samples at the six sampling stations, for a total of 57 samples. The water samples were filtered in the field, rinsed with magnesium carbonate, and preserved on dry ice because full-volume samples could not be delivered to analytical laboratory within the recommended holding period. The chlorophyll-a concentrations showed variability ranging from below the analytical reporting limit (0.00050 mg/l) to 0.016 mg/l. Of the 57 samples, 38 were below the analytical reporting limit; for statistical analyses, these concentrations were assumed to be half of the reporting limit. The high measurement, 0.016 mg/l, was from a sample taken in October 2002 at Mowitz Creek. The median of all of the chlorophyll-a results was 0.00025 mg/l (the default value for samples below the reporting limit), and the 95% upper confidence limit is 0.00174 mg/l. The two stations on the Upper Lost River (WFLAT and LRCLDM) were analyzed separately from the four upstream stations on streams that lead to Clear Lake Reservoir (MOWCRK, BCFORD, WCGSB, and FCFORD).

The 28 data points for the two Upper Lost River stations showed chlorophyll-a concentrations ranging from below the analytical reporting limit to 0.0032 mg/l, with a median of 0.00025 mg/l (the default value for samples below the reporting limit), and an 95% upper confidence limit of 0.00174 mg/l (including 21 nondetects assumed to be half of the reporting limit).

The 29 points from the four stations on streams leading to Clear Lake Reservoir showed chlorophyll-a concentrations ranging from below the laboratory reporting limit to 0.016 mg/l, with a median of 0.00025 mg/l (this is half of the laboratory reporting limit), and a 95% upper confidence level of 0.00279 mg/l. Although most of the data points in this dataset are nondetects (17 non-detects out of 29 data points), for the statistical analysis, they were assumed to be half of the reporting limit.

Using the 57 observations in the complete dataset, the relationship between total phosphorus and chlorophyll-a was weak. Neither visual observations nor water column chlorophyll-a measurements indicated impairment due to excess phosphorus. The lack of Chlorophyll-a in the water samples obtained for this analysis indicates that either the level of nutrients is too low to support excess algal growth or that some other factor is suppressing the algal growth. In either case, the beneficial uses of the Upper Lost River/Clear Lake Reservoir system are not impaired by nutrient concentrations (North Coast RWQCB, 2004d).

Spatial Representation:

The monitoring locations for the Upper Lost River/Clear Lake Reservoir area are:

- 1. Lost River below Clear Lake Reservoir dam, LRCLDM.
- 2. Lost River at Walter Flat, WFLAT.
- 3. Mowitz Creek just downstream of the 136 bridge, MOWCRK.

- 4. Boles Creek just upstream of the 136 ford, BCFORD.
- 5. No. Fork Willow Creek below the Great Society Bridge, WCGSB.
- 6. Fletcher Creek just upstream of the 73 ford, FCFORD.

Two stations are on the Upper Lost River mainstem, one is downstream of the dam and the other at Walter Flat. Station LRCLDM is at a point about 1,000 meters downstream of Clear Lake Reservoir dam. Station WFLAT is at a point about 10 meters downstream of the Walter Flat Bridge, about eight miles downstream of the dam. In addition to the two stations on the Upper Lost River, there were four monitoring locations in streams that lead to Clear Lake Reservoir, the source of the Lost River. One station was on North Fork Willow Creek, the main tributary to Clear Lake Reservoir and the primary spawning stream for the endangered Lost River and shortnose suckers. Two other sites, on Boles and Fletcher Creeks, drain into Willow Creek. The fourth site, on Mowitz Creek, drains directly into Clear Lake Reservoir but does not contribute much water to the reservoir. This site was added late in the investigation because of the opportunity to add to a sparse dataset. All of the sites, except the station below the dam, were accessible only during late spring to early fall because wet weather made the roads impassable. Sampling locations were limited to areas that could be reached by truck. Logistical issues precluded sampling in Clear Lake Reservoir.

Temporal Representation:

Sampling represents only one full season, late spring to early fall of one year. Sampling included monthly grab samples and instantaneous measurements for one season, continuous temperature monitoring for one season, and two short continuous multiparameter deployments. The sampling periods do not correspond to the time periods that the suckers are in the streams. There were limited spots at which the streams could be accessed; these might not correspond to the points that provide representative data. Drawing conclusions about the impact of water temperature and nutrients on suckers based on sampling during summer, however, is justified because those months represent the conditions worse than the fish encounter during their time in the streams.

**Environmental Conditions:** 

There are no point source waste discharges within the watershed. The land use operations that may impact the Upper Lost River watershed as nonpoint sources of water pollution are livestock operations (grazing) and timber harvest.

Data Quality Assessment:

NCRWQCB QA Procedures followed for the TMDL analysis.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic, WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: Water shall not contain bio-stimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.

Evaluation Guideline: The WQO for Bio-stimulatory substances includes Nitrogen. The

USEPA concentration of 10 mg/l NO3-N set by the USEPA (1986)

to protect human health consuming domestic water supplies.

Data Used to Assess Water Quality: Nitrogen concentration was measured from monthly grab samples at the six sampling stations, for a total of 57 samples. The system appears to be nitrogen limited with nitrogen levels far below levels expected to cause bio-stimulation in this system. There is no evidence that the bio-stimulatory narrative is exceeded. The total nitrogen concentrations were similar between the two Upper Lost River stations and the four stations upstream of Clear Lake Reservoir. The total nitrogen concentrations are well below the 10 mg/l NO3-N set by the U.S. EPA (1986) to protect human health consuming domestic water supplies. In other words, the nitrogen levels are below the concentration of concern for human health.

The analytical laboratory measured ammonia, nitrate, nitrite and TKN. Total nitrogen was calculated from the sum of TKN, nitrate, and nitrite. The total nitrogen levels showed some variability ranging from below the analytical reporting limit of 0.05 mg/l to 1.85 mg/l. Of the 57 samples, 17 were below the analytical reporting limit. Since nitrogen was present in the system these were assumed to be half of the reporting limit for statistical analyses. The highest concentration of total nitrogen, 1.85 mg/l, consisted entirely of TKN (ammonia and organic nitrogen). It was from a sample taken in August 2002 at Boles Creek during a time when the creek had no surface flow. The median of all of the total nitrogen results was 0.69 mg/l, and the 95% upper confidence level was 0.77 mg/l.

The two stations on the Upper Lost River (WFLAT and LRCLDM) were analyzed separately from the four upstream stations on streams that drain to Clear Lake Reservoir (MOWCRK, BCFORD, WCGSB, and FCFORD). The 28 data points for the two Upper Lost River stations showed total nitrogen concentrations ranging from below the laboratory-reporting limit to 1.65 mg/l, with a median of 0.76 (including 8 non-detects assumed to be half of the reporting limit for statistical analysis purposes). The 29 points from the four stations on streams leading to Clear Lake Reservoir showed total nitrogen concentrations ranging from below the laboratory-reporting limit to 1.85 mg/l, with a median of 0.57 (including 10 non-detects assumed to be half of the reporting limit for statistical analysis purposes). Ammonia concentrations are low or below the laboratory reporting level at the six sampling stations.

Analysis of all six stations grouped together shows that of 57 samples, 37 were below the analytical reporting limit. If the non-detects are included at a concentration equal to half of the reporting limit, the median concentration of ammonia is 0.025 mg/l (the default level for the nondetect samples), and the range is from below the reporting limit to 0.23 mg/l NH4-N.

Separating the four upstream stations from the two Upper Lost River stations does not show a significant difference in ammonia concentrations. If the nondetects are included at a concentration equal to half of the laboratory reporting limit, both upstream stations and downstream stations have a median ammonia concentration of 0.025 NH4-N. There are several samples with ammonia concentrations below the laboratory-reporting limit (29 total

samples with 17 non-detects in the upstream stations and 20 non-detects out of 28 total samples in the downstream sites), so analysis of these data is difficult. Calculations of the percentage of ammonia present as the toxic un-ionized ammonia were not necessary because the concentration of total ammonia at all of the stations is well below the level needed to protect the sensitive life stages of the sucker population (North Coast RWQCB, 2004d).

Spatial Representation:

The monitoring locations for the Upper Lost River/Clear Lake Reservoir area are:

- 1. Lost River below Clear Lake Reservoir dam, LRCLDM.
- 2. Lost River at Walter Flat, WFLAT.
- 3. Mowitz Creek just downstream of the 136 bridge, MOWCRK.
- 4. Boles Creek just upstream of the 136 ford, BCFORD.
- 5. No. Fork Willow Creek below the Great Society Bridge, WCGSB.
- 6. Fletcher Creek just upstream of the 73 ford, FCFORD.

Two stations are on the Upper Lost River mainstem, one is downstream of the dam and the other at Walter Flat. Station LRCLDM is at a point about 1,000 meters downstream of Clear Lake Reservoir dam. Station WFLAT is at a point about 10 meters downstream of the Walter Flat Bridge, about eight miles downstream of the dam. In addition to the two stations on the Upper Lost River, there were four monitoring locations in streams that lead to Clear Lake Reservoir, the source of the Lost River. One station was on North Fork Willow Creek, the main tributary to Clear Lake Reservoir and the primary spawning stream for the endangered Lost River and shortnose suckers. Two other sites, on Boles and Fletcher Creeks, drain into Willow Creek. The fourth site, on Mowitz Creek, drains directly into Clear Lake Reservoir but does not contribute much water to the reservoir. This site was added late in the investigation because of the opportunity to add to a sparse dataset. All of the sites, except the station below the dam, were accessible only during late spring to early fall because wet weather made the roads impassable. Sampling locations were limited to areas that could be reached by truck. Logistical issues precluded sampling in Clear Lake Reservoir.

Temporal Representation:

Sampling represents only one full season, late spring to early fall of one year. Sampling included monthly grab samples and instantaneous measurements for one season, continuous temperature monitoring for one season, and two short continuous multi-parameter deployments. The sampling periods do not correspond to the time periods that the suckers are in the streams. There were limited spots at which the streams could be accessed: these might not correspond to the points that provide representative data. Drawing conclusions about the impact of water temperature and nutrients on suckers based on sampling during summer. however, is justified because those months represent the conditions worse than the fish encounter during their time in the streams. Water temperature in the Upper Lost River/Clear Lake Reservoir watershed was investigated using: Remote continuous water and air temperature monitors (Optic stowaway data loggers) that took readings every 15 minutes from May through September 2002. Remote sensors that measured air temperature (Optic stowaway data loggers) and relative humidity (HOBO instruments)

every 15 minutes for three days in June 2003. Solar pathfinder measurements to calculate solar radiation that reached stream surfaces. A thermal infrared aerial survey in July 2001 and computer simulation modeling using the SSTEMP model. The monitoring instrument at the Boles Creek station was out of the water during that period due to seasonal dewatering and the sampling at Mowitz Creek did not begin until the following month.

Environmental Conditions:

There are no point source waste discharges within the watershed. The land use operations that may impact the Upper Lost River watershed as nonpoint sources of water pollution are livestock operations (grazing) and timber harvest.

Data Quality Assessment:

NCRWQCB QA procedures followed in the TMDL analysis.

Numeric Line of Evidence Pollutant-Water

WA - Warm Freshwater Habitat Beneficial Use:

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

Basin Plan: Dissolved Oxygen, Table3.1 Specific Water Quality Objectives for North Coast Region Clear Lake, Upper & Lower Lost

River, Tule Lake, Lower Klamath Lake:

> 5.0 mg/l, minimum 8.0 mg/l, 50% lower limit (this means that 50% or more of the monthly mean values must be equal to or greater than 8.0 mg/l).

Other Streams in Upper Lost River HA:

> 7.0 mg/l, minimum 8.0 mg/l, 50% lower limit (this means that 50% or more of the monthly mean values must be equal to or greater than 8.0 mg/l).

Evaluation Guideline:

Specific WQOs in the Basin Plan Table 3.1.

Data Used to Assess Water Quality:

The TMDL Analysis was completed for Upper Lost River and Clear Lake Reservoir Watershed. The Upper Lost River/Clear Lake Reservoir area is not listed for dissolved oxygen. This parameter. however, can be impacted by excessive biomass growth related to high nutrient concentrations. Diurnal cycles of algal respiration can lead to water that is photosynthetically supersaturated with dissolved oxygen in late afternoons and depressed in very early mornings by overnight respiration.

The most sensitive beneficial use that could be impacted by low dissolved oxygen concentrations is the ESA-listed sucker species. The amount of dissolved oxygen in water at 100% saturation is partly dependent on the altitude; the sampling stations in this analysis ranged in altitude from 4,163 to 4,921 feet above sea level. The water at this altitude can hold less dissolved oxygen, at 100% saturation, than water at lower elevations. Dissolved oxygen data at the six sampling stations consisted of instantaneous measurements at the time that grab samples were obtained and of two brief periods of continuous measurement. The Basin Plan objectives for dissolved oxygen in the Upper Lost River/Clear Lake Reservoir area are 5.0 mg/l as a minimum and 8.0 as a 50% lower limit.

There were 57 instantaneous measurements of dissolved oxygen ranging from 6.1 mg/l to 13.02 mg/l. The mean value of these

measurements is 8.83 mg/l, with a median of 8.53 mg/l, and a lower 95% confidence level of 8.44 mg/l. The high value of 13.02 mg/l was obtained at the Boles Creek station in October 2002 at a time when there was no surface flow; this value was taken at 14:30 and may represent a photosynthetically supersaturated condition. Field notes state that heavy algal growth was noted in the pool upstream of the dewatered area where samples were taken. The lowest values were still above the minimum required by the Basin Plan. The lowest value, 6.1 mg/l was obtained at 17:30 in June 2003 at Walter Flat. The next lowest value, 6.55 mg/l was obtained at 08:30 in August 2001 at the station just downstream of Clear Lake Reservoir dam.

Continuous dissolved oxygen measurements using a YSI Datasonde 6600 that measured dissolved oxygen, pH, specific conductivity, and water temperature at 15-minute increments were made in the Upper Lost River at Walter Flat from September 30 to October 2, 2002. The data show a diurnal variation with a low of 9.59 mg/l and a high of 12.11 mg/l. The mean is 10.47 mg/l, the median is 10.34 mg/l, and the 95% lower confidence level is 10.38 mg/l. A Datasonde also was deployed at this station from June 9 through June 11, 2003. Again, a diurnal cycle is seen. The data from this sampling episode show warmer temperatures and lower dissolved oxygen concentrations, ranging from a low of 5.42 mg/l to a high of 6.32 mg/l. The mean of the measurements is 5.87 mg/l, the median is 5.85 mg/l, and the lower 95% confidence interval is 5.82 mg/l.

Similarly, continuous dissolved oxygen measurements using a YSI Datasonde 6600 that measured dissolved oxygen, pH, specific conductivity, and water temperature at 15-minute increments were made in the Willow Creek sampling station from September 30 to October 2, 2002. The data show variation with a low of 10.03 mg/l and a high of 13.74 mg/l. The mean is 12.03 mg/l, the median is 12.11 mg/l, and the 95% lower confidence level is 11.89 mg/l. A Datasonde also was deployed at this station from June 10 through June 12, 2003. Again, a diurnal cycle is seen. The data from this sampling episode show warmer temperatures and lower dissolved oxygen concentrations, ranging from a low of 3.61 mg/l to a high of 12.1 mg/l. The mean of the measurements is 7.09 mg/l, the median is 6.69 mg/l, and the lower 95% confidence interval is 6.69 mg/l (North Coast RWQCB, 2004d).

# Spatial Representation:

The monitoring locations for the Upper Lost River/Clear Lake Reservoir area are:

- 1. Lost River below Clear Lake Reservoir dam, LRCLDM.
- 2. Lost River at Walter Flat, WFLAT.
- 3. Mowitz Creek just downstream of the 136 bridge, MOWCRK.
- 4. Boles Creek just upstream of the 136 ford, BCFORD.
- 5. No. Fork Willow Creek below the Great Society Bridge, WCGSB.
- 6. Fletcher Creek just upstream of the 73 ford, FCFORD.

Two stations are on the Upper Lost River mainstem, one is downstream of the dam and the other at Walter Flat. Station LRCLDM is at a point about 1,000 meters downstream of Clear Lake Reservoir dam. Station WFLAT is at a point about 10 meters

downstream of the Walter Flat Bridge, about eight miles downstream of the dam. In addition to the two stations on the Upper Lost River, there were four monitoring locations in streams that lead to Clear Lake Reservoir, the source of the Lost River. One station was on North Fork Willow Creek, the main tributary to Clear Lake Reservoir and the primary spawning stream for the endangered Lost River and shortnose suckers. Two other sites, on Boles and Fletcher Creeks, drain into Willow Creek. The fourth site, on Mowitz Creek, drains directly into Clear Lake Reservoir but does not contribute much water to the reservoir. This site was added late in the investigation because of the opportunity to add to a sparse dataset. All of the sites, except the station below the dam, were accessible only during late spring to early fall because wet weather made the roads impassable. Sampling locations were limited to areas that could be reached by truck. Logistical issues precluded sampling in Clear Lake Reservoir.

Temporal Representation:

Data from August 2001 through June 2003 at different stations. Continuous dissolved oxygen measurements using a YSI Datasonde 6600 that measured dissolved oxygen, pH, specific conductivity, and water temperature at 15-minute increments were made in the Upper Lost River at Walter Flat, Willow Creek Sampling Station, from September 30 to October 2, 2002. A Datasonde also was deployed at Upper Lost River at Walter Flat station from June 9 through June 11, 2003. Measurements taken at Boles Creek station in October 2002 at a time when there was no surface flow. Measurements taken at August 2001 at the station just downstream of Clear Lake Reservoir dam.

Environmental Conditions:

There are no point source waste discharges within the watershed. The land use operations that may impact the Upper Lost River watershed as nonpoint sources of water pollution are livestock operations (grazing) and timber harvest.

Data Quality Assessment:

NCRQWQCB QA procedures followed for the TMDL analysis.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: Water shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.

Evaluation Guideline: The WQO for Biostimulatory substances includes Phosphorus.

The USEPA phosphorus 0.05-mg/l level suggested by the USEPA to control eutrophication in streams that enter lakes (USEPA 1986).

Data Used to Assess Water

Quality:

The TMDL Analysis was completed for Upper Lost River and Clear Lake Reservoir Watershed. Total phosphorus was measured from monthly grab samples at the six sampling stations, for a total of 57 samples. The total phosphorus levels showed variability ranging from below the analytical reporting level to 4.5 mg/l. Of the 57 samples, 26 were below the analytical reporting limit; since phosphorus was present in the system these concentrations were assumed to be half of the reporting limit for statistical analyses. The

high measurement, 4.5 mg/l, was from a sample taken in May 2002 at Fletcher Creek. The median of all of the total phosphorus results was 0.068 mg/l, and the 95% upper confidence limit is 0.35 mg/l, a level influenced by the abnormally high concentration at Fletcher Creek in May 2002.

The two stations on the Upper Lost River (WFLAT and LRCLDM) were analyzed separately from the four upstream stations on streams that drain to Clear Lake Reservoir (MOWCRK, BCFORD, WCGSB, and FCFORD). The 28 data points for the two Upper Lost River stations showed total phosphorus concentrations ranging from below the laboratory reporting limit to 0.37 mg/l, with a median of 0.20 mg/l, and a 95% upper confidence level of 0.23 mg/l (including four nondetects assumed to be half of the reporting limit). The 29 points from the four stations on streams leading to Clear Lake Reservoir showed total phosphorus concentrations ranging from below the laboratory-reporting limit to 4.5 mg/l, with a median of 0.025 mg/l (this is half of the laboratory reporting limit), and a 95% upper confidence level of 0.51 mg/l. Although most of the data points in this dataset are nondetects (22 nondetects out of 29 data points), for the complete dataset analysis, they were assumed to be half of the reporting limit. Total phosphorus levels were higher in the two downstream stations than in the stream stations upstream of Clear Lake Reservoir.

Median total phosphorus concentrations in the two Upper Lost River stations were above the 0.05-mg/l level suggested by the USEPA to control eutrophication in streams that enter lakes (USEPA 1986). Soil particles from discharged water from Clear Lake Reservoir may transport soil-organic-matter phosphorus and inorganic-soil/rock phosphorus to the Upper Lost River. The levels do not appear to present a eutrophication problem in the Upper Lost River or in Clear Lake Reservoir, probably because the high turbidity reduces sunlight penetration. The USBR (2000) indicated that there has been extensive siltation of Clear Lake Reservoir. Although, phosphorus levels are elevated in comparison to U.S. EPA suggested levels, these suggested levels are not relevant because there is no evidence of excessive algal growth in the reservoir (perhaps due to turbidity levels that control light availability) and the system appears to be nitrogen limited.

In the 57 observations in this dataset, the ratio between total nitrogen and total phosphorus ranged from 0 to 74. The value of R-Squared, the proportion of variation in total nitrogen that can be accounted for by variation in total phosphorus, is 0.0001; the correlation between total nitrogen and total phosphorus is -0.0097. There is no correlation between the values. These values are slightly different if the nitrogen nondetect values were reported as zero rather than half of the reporting limit. If the data sets with nondetects and the outlier are removed, there are 21 data points available for analysis of the nitrogen/phosphorus ratio. The N/P ratio for these points is shown in the third graph. A line showing an N/P of 10 is drawn for reference. Of the 21 data points, 18 have an N/P ratio of less than 10 this indicates a system that is nitrogen limited (North Coast RWQCB, 2004d).

## Spatial Representation:

The monitoring locations for the Upper Lost River/Clear Lake Reservoir area are shown in Map 2 and are listed below with their station designations:

- 1. Lost River below Clear Lake Reservoir dam, LRCLDM.
- 2. Lost River at Walter Flat, WFLAT.
- 3. Mowitz Creek just downstream of the 136 bridge, MOWCRK.
- 4. Boles Creek just upstream of the 136 ford, BCFORD.
- 5. No. Fork Willow Creek below the Great Society Bridge, WCGSB.
- 6. Fletcher Creek just upstream of the 73 ford, FCFORD.

Two stations are on the Upper Lost River mainstem, one is downstream of the dam and the other at Walter Flat. Station LRCLDM is at a point about 1,000 meters downstream of Clear Lake Reservoir dam. Station WFLAT is at a point about 10 meters downstream of the Walter Flat Bridge, about eight miles downstream of the dam. In addition to the two stations on the Upper Lost River, there were four monitoring locations in streams that lead to Clear Lake Reservoir, the source of the Lost River. One station was on North Fork Willow Creek, the main tributary to Clear Lake Reservoir and the primary spawning stream for the endangered Lost River and shortnose suckers. Two other sites, on Boles and Fletcher Creeks, drain into Willow Creek. The fourth site. on Mowitz Creek, drains directly into Clear Lake Reservoir but does not contribute much water to the reservoir. This site was added late in the investigation because of the opportunity to add to a sparse dataset. All of the sites, except the station below the dam, were accessible only during late spring to early fall because wet weather made the roads impassable. Sampling locations were limited to areas that could be reached by truck. Logistical issues precluded sampling in Clear Lake Reservoir.

Temporal Representation:

Sampling represents only one full season, late spring to early fall of one year. Sampling included monthly grab samples and instantaneous measurements for one season, continuous temperature monitoring for one season, and two short continuous multiparameter deployments. The sampling periods do not correspond to the time periods that the suckers are in the streams. There were limited spots at which the streams could be accessed: these might not correspond to the points that provide representative data. Drawing conclusions about the impact of water temperature and nutrients on suckers based on sampling during summer is justified, because those months represent the conditions worse than the fish encounter during their time in the streams. Water temperature in the Upper Lost River/Clear Lake Reservoir watershed was investigated using: Remote continuous water and air temperature monitors (Optic stowaway dataloggers) that took readings every 15 minutes from May through September 2002. Remote sensors that measured air temperature (Optic stowaway dataloggers) and relative humidity (HOBO instruments) every 15 minutes for three days in June 2003. Solar pathfinder measurements to calculate solar radiation that reached stream surfaces. A thermal infrared aerial survey in July 2001 and computer simulation modeling using the SSTEMP model. The monitoring instrument at the Boles Creek station was out of the water during that period due to seasonal dewatering and the sampling at Mowitz Creek did not begin until the following month.

Environmental Conditions: There are no point source waste discharges within the watershed.

> The land use operations that may impact the Upper Lost River watershed as nonpoint sources of water pollution are livestock

operations (grazing) and timber harvest.

NCRWQCB QA Procedures followed for the TMDL analysis. Data Quality Assessment:

#### Line of Evidence

Pollutant-Water

Beneficial Use

WA - Warm Freshwater Habitat

Information Used to Assess Water Quality:

The Upper Lost River/Clear Lake Reservoir area is listed for nutrients and temperature in accordance with Section 303(d) of the federal Clean Water Act (CWA). The listing of the Upper Lost River/Clear Lake Reservoir watershed as impaired because of biostimulatory substances (nutrients) and high water temperature was made in 1996. In accordance with a consent decree, January 2005 is the deadline for adoption or de-listing of the TMDLs for the Upper Lost River/Clear Lake Reservoir area by the State of California. Investigation into the basis of the listings revealed that the listings were apparently conferred from the Klamath River listings and not based on data or information specific to the Upper Lost River and Clear Lake Reservoir watershed. The appropriateness of the nutrients and temperature listings in the

Upper Lost River is explored in the TMDL analysis. If the listings had been confirmed a TMDL would have been developed, however, the listings were not confirmed and de-listing for the watershed (including Clear Lake Reservoir, the streams draining to Clear Lake Reservoir and the Upper Lost River between the Clear Lake Reservoir dam and the Oregon border) is recommended by

the NCRWQCB staff.

Non-Numeric Objective: Basin Plan: Water shall not contain bio-stimulatory substances in

> concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.

The WQO for Bio-stimulatory Substances is inclusive of nutrients Evaluation Guideline:

for the NCRWQCB.

Data Used to Assess Water

Quality:

Measurement of nutrient species was planned because the Lost River is listed on the State 303(d) list for nutrients and this information is needed for system description. Ammonia, total Kjeldahl nitrogen (TKN), nitrate and nitrite were analytically determined. Total nitrogen was calculated from TKN, nitrate and nitrite. Total phosphorus and ortho-phosphate were analytically determined. The reasons for the recommendation to de-list the watershed include: There is no evidence that the biostimulatory narrative objective is exceeded. The system appears to be nitrogen limited and nitrogen levels are far below levels expected to cause biostimulation in this system. Although, phosphorus levels are elevated in comparison to U.S. EPA suggested levels, these suggested levels are not relevant because there is no evidence of excessive algal growth in the reservoir (perhaps due to turbidity levels that control light availability) and the system appears to be nitrogen limited. Dissolved oxygen levels are above the existing numeric water quality objectives. The nitrogen levels are below the concentration of concern for human health. There is no evidence of impacts from nutrients, dissolved oxygen, or other nutrient related effects on the sensitive species of concern. The beneficial uses appear to be unaffected by water temperature. The natural range of water temperatures and nutrient concentrations above Clear Lake Reservoir do not appear to be affected by anthropogenic activities (North Coast RWQCB, 2004d).

# Line of Evidence

Pollutant-Water

Beneficial Use

MU - Municipal & Domestic, WA - Warm Freshwater Habitat

Information Used to Assess Water Quality:

The Upper Lost River/Clear Lake Reservoir area is listed as impaired for nutrients and temperature in accordance with Section 303(d) of the federal Clean Water Act (CWA). The listing of the Upper Lost River/Clear Lake Reservoir watershed as impaired because of biostimulatory substances (nutrients) and high water temperature was made in 1996. In accordance with a consent decree, January 2005 is the deadline for adoption or de-listing of the TMDLs for the Upper Lost River/Clear Lake Reservoir area by the State of California. Investigation into the basis of the listings revealed that the listings were apparently conferred from the Klamath River listings and not based on data or information specific to the Upper Lost River and Clear Lake Reservoir watershed. The appropriateness of the nutrients and temperature listings in the Upper Lost River is explored in the TMDL analysis. If the listings had been confirmed a TMDL would have been developed, however, the listings were not confirmed and de-listing for the watershed (including Clear Lake Reservoir, the streams draining to Clear Lake Reservoir and the Upper Lost River between the Clear Lake Reservoir dam and the Oregon border) is recommended by the NCRWQCB staff.

Non-Numeric Objective:

Basin Plan: Water shall not contain bio-stimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.

Evaluation Guideline:

The WQO for Bio-stimulatory Substances is inclusive of nutrients.

Data Used to Assess Water Quality:

Measurement of nutrient species was planned because the Lost River is listed on the State 303(d) list for nutrients and this information is needed for system description. Ammonia, total Kjeldahl nitrogen (TKN), nitrate and nitrite were analytically determined. Total nitrogen was calculated from TKN, nitrate and nitrite. Total phosphorus and ortho-phosphate were analytically determined. The reasons for the recommendation to de-list the watershed include: There is no evidence that the biostimulatory narrative objective is exceeded. The system appears to be nitrogen limited and nitrogen levels are far below levels expected to cause biostimulation in this system. Although, phosphorus levels are elevated in comparison to U.S. EPA suggested levels, these suggested levels are not relevant because there is no evidence of excessive algal growth in the reservoir and the system appears to be nitrogen limited. Dissolved oxygen levels are above the existing numeric water quality objectives. The nitrogen levels are below the concentration of concern for human health. There is no evidence of impacts from nutrients, dissolved oxygen, or other nutrient related effects on the sensitive species of concern. The beneficial uses

appear to be unaffected by water temperature. The natural range of water temperatures and nutrient concentrations above Clear Lake Reservoir do not appear to be affected by anthropogenic activities. The temperatures below Clear Lake Reservoir are affected by anthropogenic activities (i.e., the dam and water flow fluctuations) but these activities are not addressed by a TMDL (North Coast RWQCB, 2004d).

Line of Evidence

Pollutant-Water

Beneficial Use

WA - Warm Freshwater Habitat

Information Used to Assess Water Quality:

The Upper Lost River/Clear Lake Reservoir area is listed as impaired for nutrients and temperature in accordance with Section 303(d) of the federal Clean Water Act (CWA). The listing of the Upper Lost River/Clear Lake Reservoir watershed as impaired because of biostimulatory substances (nutrients) and high water temperature was made in 1996. In accordance with a consent decree, January 2005 is the deadline for adoption or de-listing of the TMDLs for the Upper Lost River/Clear Lake Reservoir area by the State of California. Investigation into the basis of the listings revealed that the listings were apparently conferred from the Klamath River listings and not based on data or information specific to the Upper Lost River and Clear Lake Reservoir watershed. The appropriateness of the nutrients and temperature listings in the Upper Lost River is explored in the TMDL analysis. If the listings had been confirmed a TMDL would have been developed. however, the listings were not confirmed and de-listing for the watershed (including Clear Lake Reservoir, the streams draining to Clear Lake Reservoir and the Upper Lost River between the Clear Lake Reservoir dam and the Oregon border) is recommended by NCWRQCB staff.

Non-Numeric Objective:

Basin Plan: Table 3.1, Specific Water Quality Objectives for North Coast Region Clear Lake, Upper & Lower Lost River, Tule Lake, Lower Klamath Lake: > 5.0 mg/l, minimum 8.0 mg/l, 50% lower limit (this means that 50% or more of the monthly mean values must be equal to or greater than 8.0 mg/l). Other Streams in Upper Lost River HA: > 7.0 mg/l, minimum 8.0 mg/l, 50% lower limit (this means that 50% or more of the monthly mean values must be equal to or greater than 8.0 mg/l).

Data Used to Assess Water Quality:

Dissolved oxygen levels are above the existing numeric water quality objectives. There is no evidence of impacts from nutrients, dissolved oxygen, or other nutrient related effects on the sensitive species of concern. The beneficial uses appear to be unaffected by water temperature. The natural range of water temperatures and nutrient concentrations above Clear Lake Reservoir do not appear to be affected by anthropogenic activities. There is no evidence that the biostimulatory narrative objective is exceeded. The system appears to be nitrogen limited and nitrogen levels are far below levels expected to cause biostimulation in this system. Although, phosphorus levels are elevated in comparison to U.S. EPA suggested levels, these suggested levels are not relevant because there is no evidence of excessive algal growth in the reservoir and the system appears to be nitrogen limited.

Continuous dissolved oxygen measurements made in the Upper Spatial Representation:

Lost River at Walter Flat from September 30 to October 2, 2002.

Temporal Representation: Continuous dissolved oxygen measurements using a YSI

Datasonde 6600 that measured dissolved oxygen in 15-minute increments were made in the Upper Lost River at Walter Flat from

September 30 to October 2, 2002.

Line of Evidence

Pollutant-Water

Beneficial Use

WA - Warm Freshwater Habitat

Information Used to Assess Water Quality:

The Upper Lost River/Clear Lake Reservoir area is listed for nutrients and temperature in accordance with Section 303(d) of the federal Clean Water Act (CWA). The listing of the Upper Lost River/Clear Lake Reservoir watershed as impaired because of biostimulatory substances (nutrients) and high water temperature was made in 1996. In accordance with a consent decree, January 2005 is the deadline for adoption or de-listing of the TMDLs for the Upper Lost River/Clear Lake Reservoir area by the State of California. Investigation into the basis of the listings revealed that the listings were apparently conferred from the Klamath River listings and not based on data or information specific to the Upper Lost River and Clear Lake Reservoir watershed. The appropriateness of the nutrients and temperature listings in the Upper Lost River is explored in the TMDL analysis. If the listings had been confirmed a TMDL would have been developed, however, the listings were not confirmed and de-listing for the watershed (including Clear Lake Reservoir, the streams draining to

the NCRWQCB staff.

Non-Numeric Objective:

Basin Plan: Water shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.

Clear Lake Reservoir and the Upper Lost River between the Clear Lake Reservoir dam and the Oregon border) is recommended by

Evaluation Guideline:

The WQO for Biostimulatory Substances is inclusive of nutrients.

Data Used to Assess Water

Quality:

Measurement of nutrient species was planned because the Lost River is listed on the State 303(d) list for nutrients and this information is needed for system description. Ammonia, total Kjeldahl nitrogen (TKN), nitrate and nitrite were analytically determined. Total nitrogen was calculated from TKN, nitrate and nitrite. Total phosphorus and ortho-phosphate were analytically determined. The reasons for the recommendation to de-list the watershed include: There is no evidence that the biostimulatory narrative objective is exceeded. The system appears to be nitrogen limited and nitrogen levels are far below levels expected to cause biostimulation in this system. Although, phosphorus levels are elevated in comparison to U.S. EPA suggested levels, these suggested levels are not relevant because there is no evidence of excessive algal growth in the reservoir (perhaps due to turbidity levels that control light availability) and the system appears to be nitrogen limited. Dissolved oxygen levels are above the existing numeric water quality objectives. The nitrogen levels are below the concentration of concern for human health. There is no evidence of impacts from nutrients, dissolved oxygen, or other nutrient related effects on the sensitive species of concern. The beneficial uses appear to be unaffected by water temperature. The natural range of water temperatures and nutrient concentrations above Clear Lake Reservoir do not appear to be affected by anthropogenic activities. The temperatures below Clear Lake Reservoir are affected by anthropogenic activities (i.e., the dam and water flow fluctuations) but these activities are not addressed by a TMDL (North Coast RWQCB, 2004d).

# Region 1

Water Segment: Klamath River HU, Lost River HA, Clear Lake, Boles HSAs

Pollutant: Temperature, water

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under section 4.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess temperature consistent with Listing Policy section 6.1.5.9. None of the MWAT values exceeded evaluation guidelines selected to interpret the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list. The water temperature of the watershed supports the most sensitive beneficial use, the endangered sucker species.

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. There were remote continuous water and air temperature monitors that took readings every 15 minutes from May through September 2002. Of the estimated 3,000 MWATs calculated (Temperature measurements from 4 stations taken over a 5 month period considered together), none of the MWATs exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

## Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Control Plan for the Control of Temperature in the Water Quality Criterion: Coastal and Interstate Waters and Enclosed Bays and Estuaries of

California (Thermal Plan). Lost River:

- 1. Cold Interstate Waters: A. Elevated temperature waste discharges into cold interstate waters are prohibited.
- 2. Warm Interstate Waters: A. Thermal waste discharges having a maximum

temperature greater than 5°F above natural receiving water temperature are prohibited. B. Elevated temperature wastes shall not cause the temperature of warm interstate waters to increase by more than 5°F above natural temperature at any time or place. D. Lost River, Elevated temperature wastes discharged to the Lost River shall not cause the temperature of the receiving water to increase by more than 2°F when the receiving water temperature is less than 62°F, and 0°F when the receiving water temperature exceeds 62°F.

Evaluation Guideline:

The maximum weekly average temperatures (MWATs) were used from the water body to determine if the Objective was being exceeded. The Lost River Suckers and Shortnose Suckers species are listed under the Endangered Species Act and they are found in the study area. The Critical Thermal Maxima for Shortnose suckers is between the ranges of 32.1 to 33.3 °C (Castleberry and Cech, 1993). The 96-Hour Mean Lethal Concentration (LC50) for Lost River Suckers (LRS) is 31.2 °C for juveniles (with a 95% Confidence Interval range of 30.8 to 31.5 °C for juveniles) and for the Shortnose Suckers (SNS) it is 31.9 °C for larva and 31.2 °C for juveniles (with a 95% Confidence Interval range of 30.8 to 31.6 °C for juveniles) (Bellerud and Saiki, 1995) (page 34, TMDL).

Data Used to Assess Water Quality: The TMDL Analysis was completed for Upper Lost River and Clear Lake Reservoir Watershed. The most sensitive beneficial uses of Clear Lake most likely relate to the protection of the endangered sucker species. The sensitivity analysis using SSTEMP showed that daily average water temperature at the sampling stations in the streams that drain to Clear Lake Reservoir is most sensitive to influence by air temperature, solar radiation, and relative humidity. In the two Upper Lost River stations downstream of Clear Lake Reservoir, water temperature is most sensitive to inflow temperature, that is, the temperature of the water released from the Clear Lake Reservoir. The warmest stream temperatures during the data collection period were found during the week of July 15, 2002. The maximum weekly average temperatures (MWAT) at the sampling stations for that week were: WFLAT, 27.40°C; LRCLDM, 26.64°C; WCGSB, 27.63°C; FCFORD, 22.75°C. These MWATs are well below the Critical Thermal Maxima for Shortnose Suckers (32.1 to 33.3 °C) and also well below the 96-Hour Mean Lethal Concentration for both Long River Suckers and Short Nose Suckers juveniles at 31.2 °C. The water temperature of the watershed supports the most sensitive beneficial use, the endangered sucker species (North Coast RWQCB, 2004d)

Spatial Representation:

The monitoring locations for the Upper Lost River/Clear Lake Reservoir area are shown in Map 2 and are listed below with their station designations:

- 1. Lost River below Clear Lake Reservoir dam, LRCLDM.
- 2. Lost River at Walter Flat, WFLAT.
- 3. Mowitz Creek just downstream of the 136 bridge, MOWCRK.

79

- 4. Boles Creek just upstream of the 136 ford, BCFORD.
- 5. No. Fork Willow Creek below the Great Society Bridge, WCGSB.
- 6. Fletcher Creek just upstream of the 73 ford, FCFORD.

Two stations are on the Upper Lost River mainstem; one is downstream of the dam and the other at Walter Flat. Station LRCLDM is at a point about 1,000 meters downstream of Clear Lake Reservoir dam. Station WFLAT is at a point about 10 meters downstream of the Walter Flat Bridge, about eight miles downstream of the dam. In addition to the two stations on the Upper Lost River, there were four monitoring locations in streams that lead to Clear Lake Reservoir, the source of the Lost River. One station was on North Fork Willow Creek, the main tributary to Clear Lake Reservoir and the primary spawning stream for the endangered Lost River and Shortnose suckers. Two other sites, on Boles and Fletcher Creeks, drain into Willow Creek. The fourth site, on Mowitz Creek, drains directly into Clear Lake Reservoir but does not contribute much water to the reservoir. This site was added late in the investigation because of the opportunity to add to a sparse dataset. All of the sites, except the station below the dam, were accessible only during late spring to early fall because wet weather made the roads impassable. Sampling locations were limited to areas that could be reached by truck. Logistical issues precluded sampling in Clear Lake Reservoir.

Temporal Representation:

Sampling represents only one full season, late spring to early fall. Sampling included monthly grab samples and instantaneous measurements for one season, continuous temperature monitoring for one season, and two short continuous multiparameter deployments. The sampling periods do not correspond to the time periods that the suckers are in the streams. There were limited spots at which the streams could be accessed; these might not correspond to the points that provide representative data. Drawing conclusions about the impact of water temperature and nutrients on suckers based on sampling during summer, however, is justified because those months represent the conditions worse than the fish encounter during their time in the streams. Water temperature in the Upper Lost River/Clear Lake Reservoir watershed was investigated using: Remote continuous water and air temperature monitors (Optic stowaway data loggers) that took readings every 15 minutes from May through September 2002. Remote sensors that measured air temperature (Optic stowaway data loggers) and relative humidity (HOBO instruments) every 15 minutes for three days in June 2003. Solar pathfinder measurements to calculate solar radiation that reached stream surfaces. A thermal infrared aerial survey in July 2001 and computer simulation modeling using the SSTEMP model. The monitoring instrument at the Boles Creek station was out of the water during that period due to seasonal dewatering and the sampling at Mowitz Creek did not begin until the following month.

Environmental Conditions:

There are no point source waste discharges within the watershed. The land use operations that may impact the Upper Lost River watershed as nonpoint sources of water pollution are livestock operations (grazing) and timber harvest.

Data Quality Assessment:

NCRWQCB QA Procedures followed in the TMDL analysis.

Line of Evidence

Pollutant-Water

Beneficial Use

WA - Warm Freshwater Habitat

Information Used to Assess Water Quality:

The Upper Lost River/Clear Lake Reservoir area is listed for nutrients and temperature in accordance with Section 303(d) of the federal Clean Water Act (CWA). The listing of the Upper Lost River/Clear Lake Reservoir watershed as impaired because of biostimulatory substances (nutrients) and high water temperature was made in 1996. In accordance with a consent decree, January 2005 is the deadline for adoption or de-listing of the TMDLs for the Upper Lost River/Clear Lake Reservoir area by the State of California. Investigation into the basis of the listings revealed that the listings were apparently conferred from the Klamath River listings and not based on data or information specific to the Upper Lost River and Clear Lake Reservoir watershed. The appropriateness of the nutrients and temperature listings in the Upper Lost River is explored in the TMDL analysis. If the listings had been confirmed a TMDL would have been developed, however, the listings were not confirmed and de-listing for the watershed (including Clear Lake Reservoir, the streams draining to Clear Lake Reservoir and the Upper Lost River between the Clear Lake Reservoir dam and the Oregon border) is recommended by NCRWQCB staff.

Non-Numeric Objective:

Basin Plan: The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased by more than 5°F above natural receiving water temperature. At no time or place shall the temperature of WARM intrastate waters be increased more than 5°F above natural receiving water temperature.

Evaluation Guideline:

The data collection effort associated with this analysis consisted of three components: collection and review of existing data, water quality grab samples (and associated instantaneous field measurements), and the short-term use of continuous monitoring devices. Neither visual observations nor water quality sampling indicated impairment due to excess nutrients, although the turbidity levels in the reservoir and in the Upper Lost River probably suppress primary production. The high level of turbidity noted in the Upper Lost River is of concern, but was not the subject of this analysis.

Data Used to Assess Water Quality: Species listed under the federal Endangered Species Act are found in the study area, Lost River Suckers and Shortnose Suckers are classified as endangered species. The most sensitive beneficial uses most likely relate to the protection of the endangered sucker species. These fish can tolerate poor water quality such as low dissolved oxygen, high water temperature, and elevated pH levels, but the fish may not thrive at long-term, continual poor conditions resulting from habitat fragmentation, hydrologic regime alterations, and water diversion. Clear Lake Reservoir appears to possess a healthy population of Lost River and Shortnose suckers compared to other populations in the Klamath and Lost River Basin. The water

quality and habitat conditions in the reservoir and its tributaries are better than elsewhere in the Klamath River and Lost River basins. Although the North Coast Regional Water Quality Control Board Water Quality Control Plan (Basin Plan) lists a cold-water fishery beneficial use for the study area, the current or historical presence of cold-water fish could not be confirmed. Computer simulation modeling suggests that decreasing solar radiation by increasing shade over the streams that drain into Clear Lake Reservoir could decrease water temperatures. The potential for increasing the shade due to riparian vegetation, however, is unlikely in all of these streams except for Willow Creek because of the inability of the soils to support increased vegetative growth. The Upper Lost River is more sensitive to the water temperature of the water released from Clear Lake Reservoir than to solar radiation. Even at current shade levels, the water temperature in the watershed supports the most sensitive beneficial use, the endangered sucker species. The relative health of the Clear Lake Reservoir Shortnose and Lost River sucker population is notable. Given the significance of the Clear Lake Reservoir watershed to preserving the Lost River and Shortnose sucker populations, it is necessary to preserve the aquatic habitat from any harmful effects related to land use activities. Willow Creek and its tributaries (primarily Boles Creek) are the only spawning sites for the sucker populations; it is especially important to protect valuable properly functioning riparian conditions in this stream. Regional Water Board staff has seen no information showing that the natural range of water temperature or nutrient concentrations in the streams draining into Clear Lake Reservoir are outside of the natural range for that environment due to anthropogenic causes (North Coast RWQCB, 2004d).

Spatial Representation:

There are six monitoring locations total. Two stations are on the Upper Lost River mainstem, one is downstream of the dam and the other at Walter Flat. Station LRCLDM is at a point about 1,000 meters downstream of Clear Lake Reservoir dam. Station WFLAT is at a point about 10 meters downstream of the Walter Flat Bridge, about eight miles downstream of the dam. In addition to the two stations on the Upper Lost River, there were four monitoring locations in streams that lead to Clear Lake Reservoir, the source of the Lost River. One station was on North Fork Willow Creek, the main tributary to Clear Lake Reservoir and the primary spawning stream for the endangered Lost River and Shortnose suckers. Two other sites, on Boles and Fletcher Creeks, drain into Willow Creek. The fourth site, on Mowitz Creek, drains directly into Clear Lake Reservoir but does not contribute much water to the reservoir. This site was added late in the investigation because of the opportunity to add to a sparse dataset. Logistical issues precluded sampling in Clear Lake Reservoir.

Temporal Representation:

Water temperature in the Upper Lost River/Clear Lake Reservoir watershed was investigated using: Remote continuous water and air temperature monitors (Optic stowaway data loggers) that took readings every 15 minutes from May through September 2002. Remote sensors that measured air temperature (Optic stowaway dataloggers) and relative humidity (HOBO instruments) every 15 minutes for three days in June 2003. Solar pathfinder measurements to calculate solar radiation that reached stream

surfaces. A thermal infrared aerial survey in July 2001and computer simulation modeling using the SSTEMP model. All of the sites, except the station below the dam, were accessible only during late spring to early fall because wet weather made the roads impassable. Sampling locations were limited to areas that could be reached by truck.

# Region 1

Water Segment: Klamath River HU, Salmon River HA

Pollutant: Nutrients

**Decision:** Delist

Weight of Evidence:

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

There are nine lines of evidence that are available in the administrative record to assess the existing nutrients listing. The Salmon River was added to the 303(d) List for nutrients in 1992. Regional Board staff conducted a water quality monitoring effort to evaluate the impact of nutrients in the Salmon River watershed. Based on these eight lines of evidence that there is no indication that nutrients are impacting the Salmon River HA. NCRWQCB staff recommends that the Salmon River be delisted for nutrients.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. The narrative nutrient information as well as the observations of attached algae indicates that nutrients are not reaching nuisance levels in the Salmon River HA. Analytical results of nutrient grab samples were generally non-detect and they did not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

# **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat

Matrix: Water

Water Quality Objective/ There is no NCRWQCB Basin Plan Water Quality Objective for

Water Quality Criterion: TOC for Salmon River HA.

Data Used to Assess Water

Quality:

The grab samples were analyzed for TOC in addition to pH, dissolved oxygen, temperatures and specific conductance. There were 22 TOC measurements in total. The average of the samples taken was 1.10. The range of the measurements taken between June and October 2002 was 0.9 to 1.7 (North Coast RWQCB, 2004 a)

2004c).

Spatial Representation: There were 5 sampling locations. The sampling locations included

the North Fork downstream of Sawyers Bar, the South Fork downstream of Cecilville, the Salmon River downstream of Forks of Salmon and Salmon River near the mouth. In addition, grab samples were collected near the mouth of Wooley Creek; this site was considered a control site, as the sub-watershed is a wilderness

area.

Temporal Representation: The Salmon River was added to the list for nutrients in 1992. In the

summer of 2002 NCRWQCB Staff conducted a water quality monitoring effort to evaluate impairment of the Salmon River by nutrients. The monitoring plan involved collecting grab samples on three consecutive days once per month in June through October 2002 at locations in the Salmon River watershed located immediately downstream of community centers within the

watershed.

Data Quality Assessment: NCRWQCB QA. Data were collected compliant with a quality

assurance plan. Blind duplicate samples were collected as a data

quality control measure with acceptable results.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: There is no NCRWQCB Basin Plan Water Quality Objective for

Chlorophyll-a applicable to Salmon River HA.

Evaluation Guideline: There are no applicable criteria for Chlorophyll-a that could be used

for the Salmon River.

Data Used to Assess Water

Quality:

The grab samples were analyzed for Chlorophyll-a in addition to pH, dissolved oxygen, temperatures and specific conductance.

There were 55 measurements the majority of which were non-

detects (North Coast RWQCB, 2004c).

Spatial Representation: There were 5 sampling locations. The sampling locations included

the North Fork downstream of Sawyers Bar, the South Fork downstream of Cecilville, the Salmon River downstream of Forks of Salmon and Salmon River near the mouth. In addition, grab samples were collected near the mouth of Wooley Creek; this site was considered a control site, as the sub-watershed is a wilderness

area.

Temporal Representation: The Salmon River was added to the list for nutrients in 1992. In the

summer of 2002 NCRWQCB Staff conducted a water quality monitoring effort to evaluate impairment of the Salmon River by nutrients. The monitoring plan involved collecting grab samples on three consecutive days once per month in June through October 2002 at locations in the Salmon River watershed located immediately downstream of community centers within the

watershed.

NCRWQCB QA. Data were collected compliant with a quality Data Quality Assessment:

assurance plan. Blind duplicate samples were collected as a data

quality control measure with acceptable results.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

Basin Plan: Water shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such

growths cause nuisance or adversely affect beneficial uses.

Evaluation Guideline: Phosphorus is considered in the narrative objective for biostimulatory substances. There are no applicable criteria for

Phosphorus that could be used for the Salmon River. In 2002. SWRCB staff recommended not listing for elemental phosphorus for Laguna de Santa Rosa because there was no appropriate phosphorus objective or evaluation guideline to interpret the narrative objective that was available to the NCRWQCB.

Data Used to Assess Water

Quality:

The grab samples were analyzed for Phosphorus in addition to pH, dissolved oxygen, temperatures and specific conductance. There were 55 measurements in total the majority of which were nondetects. With all non-detect values at the Mainstern Salmon River at USGS Gage Station; All non-detects and a value of 0 on 6/10/2002 at Wooley Creek Station; With all non-detects at Mainstern Salmon River at Forks of Salmon Station: All non-detects at North Fork Salmon at Sawyers Bar Station; and all non-detect values at South Fork Salmon at Cecilville (North Coast RWQCB, 2004c).

Spatial Representation:

There were 5 sampling locations. The sampling locations included the North Fork downstream of Sawyers Bar, the South Fork downstream of Cecilville, the Salmon River downstream of Forks of Salmon and Salmon River near the mouth. In addition, grab samples were collected near the mouth of Wooley Creek; this site was considered a control site, as the sub-watershed is a wilderness area.

Temporal Representation:

The Salmon River was added to the list for nutrients in 1992. In the summer of 2002 NCRWQCB Staff conducted a water quality monitoring effort to evaluate impairment of the Salmon River by nutrients. The monitoring plan involved collecting grab samples on three consecutive days once per month in June through October 2002 at locations in the Salmon River watershed located immediately downstream of community centers within the

watershed.

Data Quality Assessment: NCRWQCB QA. Data were collected compliant with a quality

assurance plan. Blind duplicate samples were collected as a data

quality control measure with acceptable results.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Water Quality Criterion: There is no NCRWQCB Basin Plan Water Quality Objective for

Ammonia as Nitrogen applicable to Salmon River HA.

Evaluation Guideline: There are no applicable criteria for Ammonia as Nitrogen that

applies.

Data Used to Assess Water

Quality:

The grab samples were analyzed for Ammonia as Nitrogen in addition to pH, dissolved oxygen, temperatures and specific conductance. There were 55 measurements in total the majority of which were non-detects. With non-detect values and a value at 0.052 on 6/10/2002, and another at 0.062 on 7/23/2002 at the mainstem Salmon River at USGS Gage Station; Non-detects and a value of 0.056 on 6/10/2002 and 0.052 on 7/22/2002 at Wooley Creek Station; With all non-detects at mainstem Salmon River at Forks of Salmon Station; All non-detects at North Fork Salmon at Sawyers Bar Station; and all non-detect values at South Fork

Salmon at Cecilville (North Coast RWQCB, 2004c).

Spatial Representation: There were 5 sampling locations. The sampling locations included

the North Fork downstream of Sawyers Bar, the South Fork downstream of Cecilville, the Salmon River downstream of Forks of Salmon and Salmon River near the mouth. In addition, grab samples were collected near the mouth of Wooley Creek; this site was considered a control site, as the sub-watershed is a wilderness

area.

Temporal Representation: The Salmon River was added to the list for nutrients in 1992. In the

summer of 2002 NCRWQCB Staff conducted a water quality monitoring effort to evaluate impairment of the Salmon River by nutrients. The monitoring plan involved collecting grab samples on three consecutive days once per month in June through October 2002 at locations in the Salmon River watershed located immediately downstream of community centers within the

watershed.

Data Quality Assessment: NCRWQCB QA. Data were collected compliant with a quality

assurance plan. Blind duplicate samples were collected as a data

quality control measure with acceptable results.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Water Quality Criterion: There is no NCRWQCB Basin Plan Water Quality Objective for Nitrate/Nitrite as Nitrogen applicable to Salmon River HA. There is

a Municipal Beneficial Use for Salmon River HA.

Evaluation Guideline: With regards to the Municipal beneficial use applicable to Salmon

River. The MCL Criteria for Nitrate/Nitrite as Nitrogen apply. Title 22(www.calregs.com) Table 64431-A lists the MCL--Inorganic Chemicals criteria for Nitrate/Nitrite as Nitrogen as 10.0 mg/L.

Data Used to Assess Water The grab samples were analyzed for Nitrate/Nitrite as Nitrogen in

Quality: addition to pH, dissolved oxygen, temperatures and specific

conductance. There were 55 measurements in total the majority of which were non-detects. With all non-detect values at the Mainstem Salmon River at USGS Gage Station; All non-detects at Wooley Creek Station; With non-detects and one value of 0.15 on 6/11/02 at Mainstem Salmon River at Forks of Salmon Station; All non-detects at North Fork Salmon at Sawyers Bar Station; and non-detect values and one value at 0.058 at South Fork Salmon at

Cecilville (North Coast RWQCB, 2004c).

Spatial Representation: There were 5 sampling locations. The sampling locations included

the North Fork downstream of Sawyers Bar, the South Fork downstream of Cecilville, the Salmon River downstream of Forks of Salmon and Salmon River near the mouth. In addition, grab samples were collected near the mouth of Wooley Creek; this site was considered a control site, as the sub-watershed is a wilderness

area.

Temporal Representation: The Salmon River was added to the list for nutrients in 1992. In the

summer of 2002 NCRWQCB Staff conducted a water quality monitoring effort to evaluate impairment of the Salmon River by nutrients. The monitoring plan involved collecting grab samples on three consecutive days once per month in June through October 2002 at locations in the Salmon River watershed located

2002 at locations in the Salmon River watershed located immediately downstream of community centers within the

watershed.

Data Quality Assessment: NCRWQCB QA. Data were collected compliant with a quality

assurance plan. Blind duplicate samples were collected as a data

quality control measure with acceptable results.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

There is no NCRWQCB Basin Plan Water Quality Objective for Total Kjeldahl Nitrogen (TKN) applicable to Salmon River HA.

Data Used to Assess Water

Quality:

The grab samples were analyzed for TKN in addition to pH, dissolved oxygen, temperatures and specific conductance. There were 55 measurements in total the majority of which were non-detect. With non-detect values and analysis of 0.7 on 7/22/02 and the state of 0.7 on 7/22/02 and 0.

detects. With non detect values and one value of 0.7 on 7/23/02 at the Mainstem Salmon River at USGS Gage Station; All non-detects at Wooley Creek Station; With non-detects and one value of 0.6 on 7/23/02 at Mainstem Salmon River at Forks of Salmon Station; All non-detects at North Fork Salmon at Sawyers Bar Station; and non-detect values and one value at 0.8 at South Fork Salmon at

Cecilville (North Coast RWQCB, 2004c).

Spatial Representation: There were 5 sampling locations. The sampling locations included

the North Fork downstream of Sawyers Bar, the South Fork downstream of Cecilville, the Salmon River downstream of Forks of

Salmon and Salmon River near the mouth. In addition, grab samples were collected near the mouth of Wooley Creek; this site was considered a control site, as the sub-watershed is a wilderness

area.

The Salmon River was added to the list for nutrients in 1992. In the Temporal Representation:

summer of 2002 NCRWQCB Staff conducted a water quality monitoring effort to evaluate impact of the nutrients in the Salmon River. The monitoring plan involved collecting grab samples on three consecutive days once per month in June through October 2002 at locations in the Salmon River watershed located immediately downstream of community centers within the

watershed.

NCRWQCB QA. Data were collected compliant with a quality Data Quality Assessment:

assurance plan. Blind duplicate samples were collected as a data

quality control measure with acceptable results.

Numeric Line of Evidence Pollutant-Nuisance

Beneficial Use: CO - Cold Freshwater Habitat

Matrix: -N/A

Water Quality Objective/ Water Quality Criterion:

Basin Plan: Water shall not contain bio-stimulatory substances in concentrations that promote aquatic growths to the extent that such

growths cause nuisance or adversely affect beneficial uses.

The rationale for conducting the survey was to evaluate the Evaluation Guideline:

"nuisance" growths of aquatic plants, in relation to the narrative objective for bio-stimulatory substances in the Basin Plan.

Data Used to Assess Water

Quality:

In all but a few cases, all nutrient parameters were non-detect. Based on the available data, there is no indication that nutrients are

impairing the Salmon River watershed. Analytical results of nutrient grab samples were generally non-detect. Observations of attached algae, presence of which represents a primary biological response to nutrient concentrations in streams, indicate that aquatic plants do

not reach nuisance levels (North Coast RWQCB, 2004c).

Spatial Representation: There were 5 sampling locations. The sampling locations included

> the North Fork downstream of Sawvers Bar, the South Fork downstream of Cecilville, the Salmon River downstream of Forks of Salmon and Salmon River near the mouth. In addition, grab samples were collected near the mouth of Wooley Creek; this site was considered a control site, as the sub-watershed is a wilderness

area.

The Salmon River was added to the list for nutrients in 1992. In the Temporal Representation:

summer of 2002 NCRWQCB Staff conducted a water quality monitoring effort to evaluate impairment of the Salmon River by nutrients. The monitoring plan involved collecting grab samples on three consecutive days once per month in June through October at locations in the Salmon River watershed located immediately

downstream of community centers within the watershed.

NCRWQCB QA. Data were collected compliant with a quality Data Quality Assessment:

assurance plan. Blind duplicate samples were collected as a data

quality control measure.

Numeric Line of Evidence Pollutant-Nuisance

Beneficial Use: CO - Cold Freshwater Habitat Matrix: Water

Water Quality Objective/ Basin Plan: The pH shall conform to those limits listed in Table 3-1. Water Quality Criterion: For waters not listed in Table 3-1 and where pH objectives are not

For waters not listed in Table 3-1 and where pH objectives are not prescribed, the pH shall not be depressed below 6.5 nor raised above 8.5. Changes in normal ambient pH levels shall not exceed 0.2 units in waters with designated marine (MAR) or saline (SAL) beneficial uses nor 0.5 units within the range specified above in fresh waters with designated COLD or WARM beneficial uses.

Evaluation Guideline: Table 3-1 in the NCRWQCB Basin Plan lists the Salmon River HA

(All streams) WQO for pH as a minimum at 7.0 and the maximum

at 8.5.

Data Used to Assess Water

Quality:

The grab samples were analyzed for pH in addition to dissolved oxygen, temperatures and specific conductance. They were measured using an YSI 600XL datasondes when grab samples were collected. There were 25 pH measurements in total with an average pH of 7.55. The WQO for Salmon River is attained by all samples except for one measurement taken on 6/11/02 that was below the 7.0 WQO at 6.97 (North Coast RWQCB, 2004c).

Spatial Representation: There were 5 sampling locations. The sampling locations included

the North Fork downstream of Sawyers Bar, the South Fork downstream of Cecilville, the Salmon River downstream of Forks of Salmon and Salmon River near the mouth. In addition, grab samples were collected near the mouth of Wooley Creek; this site was considered a control site, as the sub-watershed is a wilderness

area.

Temporal Representation: The Salmon River was added to the list for nutrients in 1992. In the

summer of 2002 NCRWQCB Staff conducted a water quality monitoring effort to evaluate impairment of the Salmon River by nutrients. The monitoring plan involved collecting grab samples on three consecutive days once per month in June through October 2002 at locations in the Salmon River watershed located immediately downstream of community centers within the

watershed.

Data Quality Assessment: NCRWQCB QA. Data were collected compliant with a quality

assurance plan. Blind duplicate samples were collected as a data

quality control measure with acceptable results.

Line of Evidence Pollutant-Nuisance

Beneficial Use CO - Cold Freshwater Habitat

Information Used to Assess

Water Quality:

The Salmon River, tributary to the Klamath River in Siskiyou County, was included in a nutrient impaired listing of Hydrologic Unit 105.00 (Klamath River Basin) pursuant to the requirements of CWA 303(d). The Klamath River mainstem is the subject of separate analysis and TMDL development for impairments, of

which nutrients is one.

Non-Numeric Objective: Basin Plan: Water shall not contain bio-stimulatory substances in

concentrations that promote aquatic growths to the extent that such

growths cause nuisance or adversely affect beneficial uses.

Evaluation Guideline: The rationale for conducting the survey was to evaluate the

"nuisance" growths of aquatic plants, in relation to the narrative

objective for bio-stimulatory substances in the Basin Plan.

Data Used to Assess Water

Quality:

In all but a few cases, all nutrient parameters were non detect. There is no indication that the Salmon River Watershed is impaired by nutrients. Observations of attached algae indicate that aquatic plants do not reach nuisance levels. Quasi-Quantitative surveys of the percent cover of attached algae in the river at the monitoring location were conducted in July and August 2002. The surveys involved making visual assessments of the percent cover of attached algae and the conditions of the algal community within the immediate vicinity of the monitoring locations (North Coast RWQCB, 2004c).

Spatial Representation:

There were 5 sampling locations. The sampling locations included the North Fork downstream of Sawyers Bar, the South Fork downstream of Cecilville, the Salmon River downstream of Forks of Salmon and Salmon River near the mouth. In addition, grab samples were collected near the mouth of Wooley Creek; this site was considered a control site, as the sub-watershed is a wilderness area.

Temporal Representation:

The Salmon River was added to the list for nutrients in 1992. In the summer of 2002 NCRWQCB Staff conducted a water quality monitoring effort to evaluate impairment of the Salmon River by nutrients. The monitoring plan involved collecting grab samples on three consecutive days once per month in June through October at locations in the Salmon River watershed located immediately downstream of community centers within the watershed.

## Region 1

Water Segment: Russian River HU, Lower Russian River HA, Guerneville HSA

Pollutant: Turbidity

Decision: Delist

Weight of This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under section 4.2 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. None of the samples out of 27 samples collected for Pocket Canyon Creek a tributary of the Russian River HU exceeded the 25 NTU turbidity evaluation guideline used to interpret the water quality objective. Only the Pocket Canyon Creek portion that was sampled for the Guerneville HSA should be removed from the list. The other lines of evidence collected from Dutch Bill Creek, Lancel Creek, and Jenner Creek did not have enough samples to be considered for a delisting in the Guerneville HSA. These segments should remain listed on the 303(d) List as they are currently listed for sedimentation/siltation for this water segment.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. None of the 27 samples collected for Pocket Canyon Creek exceeded the turbidity water quality objective and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

# SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination for the Pocket Canyon Creek portion of the Guerneville HSA should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not exceeded. The rest of the segments currently listed under the Russian River HU, Lower Russian River HA, Guerneville HSA should remain on the 303(d) List for sedimentation/siltation as they are currently.

## Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. Turbidity shall not be increased more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or

waiver thereof. Water shall not contain substances in

concentrations that result in deposition of material that causes

nuisance or adversely affect beneficial uses.

Evaluation Guideline: The evaluation guideline that has been used to determine turbidity

exceedance is from published-peer reviewed paper, "The Effects of Chronic Turbidity on Density and Growth of Steelheads and Coho Salmon", John W Sigler (1984). The guideline is "In our studies, as little as 25 NTUs of turbidity caused a reduction in fish growth."

Data Used to Assess Water

Quality:

None of the turbidity samples were in exceedance of the turbidity

evaluation guideline of 25 NTU.

Spatial Representation: All samples were taken at sampling location Lancel Creek a

tributary to Dutch Bill Creek which is tributary to the Russian River.

The sampling location LAN010 is located at Occidental.

Temporal Representation: Samples were taken once a month in April, May, June, September,

October and December 2003.

Data Quality Assessment: Draft QAPP for Volunteer Water Quality Monitoring Project for the

Community Clean Water Institute.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, R1 - Water Contact Recreation, R2 -

Non-Contact Recreation, RA - Rare & Endangered Species, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. Turbidity shall not be increased more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or

waiver thereof. Water shall not contain substances in

concentrations that result in deposition of material that causes

nuisance or adversely affect beneficial uses.

Evaluation Guideline: The evaluation guideline that has been used to determine turbidity

exceedance is from published-peer reviewed paper, "The Effects of Chronic Turbidity on Density and Growth of Steelheads and Coho Salmon", John W Sigler (1984). The guideline is "In our studies, as little as 25 NTUs of turbidity caused a reduction in fish growth."

Data Used to Assess Water

Quality:

There were no exceedances at the JEN020 location. There were 2 exceedances of the evaluation guideline at the RUS010 location. These exceedances were on 1/29/2003 at 42.1 NTU and on 4/30/2003 at 35.3 NTU. The two locations were considered for Jenner Creek. There were 12 turbidity samples total with 2

exceedances (Sandler, 2004).

Spatial Representation: There were two sampling locations. All samples were along Jenner

Creek, a tributary to the lower Russian River. JEN020 is located by fish ladder, Jenner. RUS010 is located near a boat house, Jenner.

Temporal Representation: Samples were taken once a month, a single measurement on one

day at each site during January, February, April, May, August and

November 2003.

Data Quality Assessment: Draft QAPP for Volunteer Water Quality Monitoring Project for the

Community Clean Water Institute.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. Turbidity shall not be increased more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof. Water shall not contain substances in

concentrations that result in deposition of material that causes

nuisance or adversely affect beneficial uses.

Evaluation Guideline: The evaluation guideline that has been used to determine turbidity

exceedance is from published-peer reviewed paper, "The Effects of Chronic Turbidity on Density and Growth of Steelheads and Coho Salmon", John W Sigler (1984). The guideline is "In our studies, as little as 25 NTUs of turbidity caused a reduction in fish growth."

Data Used to Assess Water

Quality:

There were no exceedances of the turbidity evaluation guideline. All of the turbidity samples were well below the evaluation guideline

(Sandler, 2004).

Spatial Representation: All samples were along Dutch Bill Creek. There were five sampling

locations. These locations are: DBC010 is located near the fish

ladder at Occidental.

DBC020 is located at Westminister, downstream from Bohemian Ranch, Occidental. DBC030 is located at Camp Meeker dam. DBC050 is located 75 yards downstream from pump station, Occidental. DBC060 is located at Graton Rd. and Main St., at

bridge, Occidental.

Temporal Representation: Samples were taken once a month, a single measurement on one

day at each station during April, May, June, September, October

and December 2003.

Samples were taken at DBC050 and DBC060 once a month, a single measurement on one day at each station during April, May,

June, September and December 2003.

Data Quality Assessment: Draft QAPP for Volunteer Water Quality Monitoring Project for the

Community Clean Water Institute.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat

Matrix: Water

Water Quality Objective/ Basin Plan: The suspended sediment load and suspended Water Quality Criterion: Basin Plan: The suspended sediment load and suspended sediment load and suspended sediment load and suspended water Quality Criterion:

sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. Turbidity shall not be increased more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or

waiver thereof. Water shall not contain substances in

concentrations that result in deposition of material that causes

nuisance or adversely affect beneficial uses.

Evaluation Guideline: The evaluation guideline that has been used to determine turbidity

exceedance is from published-peer reviewed paper, "The Effects of Chronic Turbidity on Density and Growth of Steelheads and Coho Salmon", John W Sigler (1984). The guideline is "In our studies, as little as 25 NTUs of turbidity caused a reduction in fish growth."

Data Used to Assess Water

Quality:

All of the samples are below the 25 NTU turbidity evaluation

guideline with a range of measurements from 0.4 NTU to 7.3 NTU

(Sandler, 2004).

Spatial Representation: Sampling was done at three locations in Pocket Creek a tributary to

the lower Russian River within the greater Guerneville HSA. PCC020 is located in Guerneville, at 12170 Hwy 116, downstream

of Inn and the tank in the creek.

PCC030 is located in Guerneville, at 11900 Hwy 116, in the backyard. PCC040 is located in Guerneville, 50 feet upstream from

bridge along Hwy 116 at May's Canyon Road.

Temporal Representation: Samples were taken once a month on the same days at each

station during January, February, March, May, and August through

December 2003.

Data Quality Assessment: Draft QAPP for Volunteer Water Quality Monitoring Project for the

Community Clean Water Institute.

Page left blank intentionally.

# Fact Sheets Supporting Revision of the Section 303(d) List



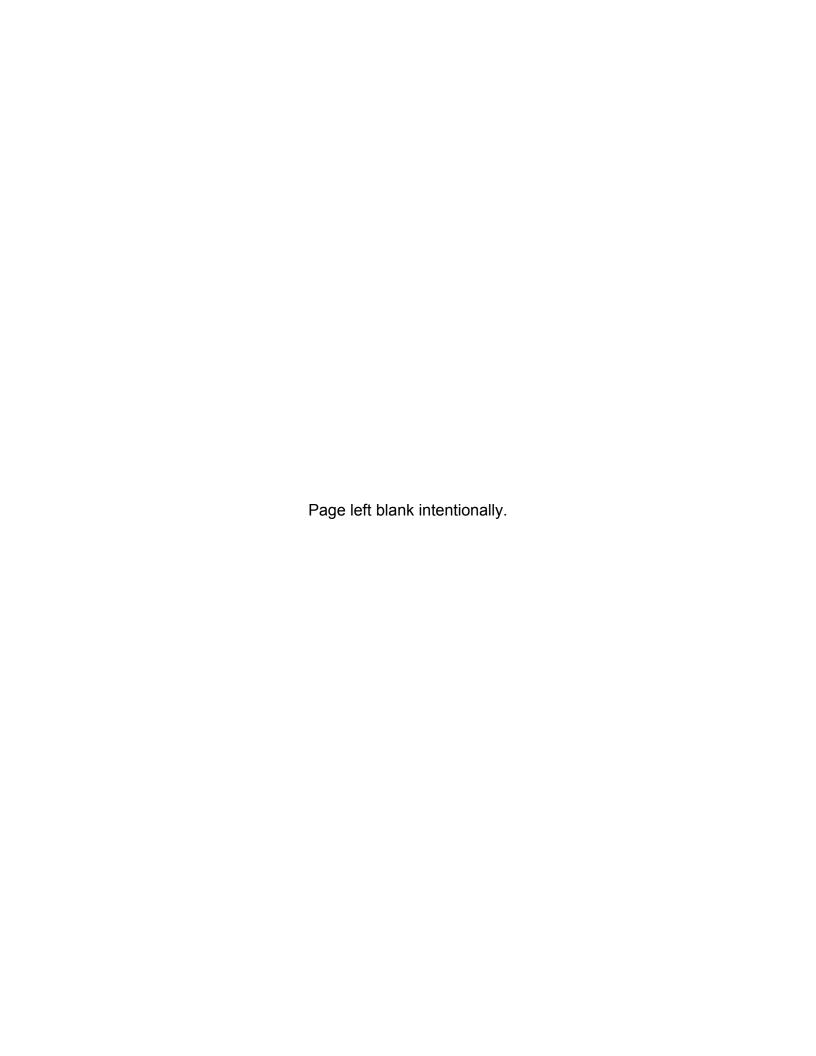
November 2006

# **Table of Contents**

NEW OR REVISED FACT SHEETS	5
LISTING RECOMMENDATIONS	6
Lake Chabot (Alameda Co)	7
Chlordane	
DDT	9
Dieldrin	11
Mercury	
Polychlorinated biphenyls	
Pacific Ocean at Pillar Point	
Mercury	
Stevens Creek Reservoir	
Chlordane	
Dieldrin	
Mercury	
Polychlorinated biphenyls	25
LIST AS BEING ADDRESSED RECOMMENDATIONS	27
Lagunitas Creek	28
Pathogens	28
Stege Marsh	
Chlordane	
Copper	
Dacthal	
Dieldrin	
Mercury	
Polychlorinated biphenyls	
Zinc	
Tomales Bay Pathogens	
ratiogens	
Delisting Recommendations	51
San Francisco Bay, Lower	52
Nickel	52
ORIGINAL FACT SHEETS	55
LISTING RECOMMENDATIONS	56
Anderson Reservoir	
Mercury	
Polychlorinated biphenyls	
Bon Tempe Reservoir	
Mercury	
Del Valle Reservoir	
Mercury	63
Polychlorinated hiphenyls	65

Islais Creek	67
Sediment Toxicity	67
Lafayette Reservoir	70
Mercury	
Polychlorinated biphenyls	72
Nicasio Reservoir	74
Mercury	
Oakland Inner Harbor (Fruitvale Site, part of SF Bay, Central)	76
Sediment Toxicity	
San Pablo Reservoir	78
Chlordane	78
Dieldrin	80
Heptachlor epoxide	82
Polychlorinated biphenyls	84
Toxaphene	
Shadow Cliffs Reservoir	
Mercury	
Polychlorinated biphenyls	
Soulejule Reservoir	
Mercury	
Polychlorinated biphenyls	
Stevens Creek	
Toxicity	
Davidania Davidania davida	00
DELISTING RECOMMENDATIONS	98
Carquinez Strait	
Diazinon	
Central Basin, San Francisco (part of SF Bay, Central)	
Diazinon	
Islais Creek	
Endosulfan sulfate	
Polychlorinated biphenyls	
Mission Creek	
Chlorpyrifos	
Chromium (total)	
Copper	
Mirex	
Oakland Inner Harbor (Fruitvale Site, part of SF Bay, Central)	
Diazinon	127
Oakland Inner Harbor (Pacific Dry-dock Yard 1 Site, part of SF Bay, Central)	
Chlorpyrifos	
Diazinon	
Mirex	
Tributylin TBT (Tributylstanne)	
ppDDE	141
Sacramento San Joaquin Delta	
Diazinon	
San Francisco Bay, Central	
Diazinon	
San Francisco Bay, Lower	
Diazinon	149

San Francisco Bay, South	152
Diazinon	152
San Leandro Bay (part of SF Bay, Central)	155
DDT	
Diazinon	158
Selenium	162
San Pablo Bay	165
Diazinon	165
Suisun Bay	168
Diazinon	
AREA CHANGE RECOMMENDATIONS	171
San Francisco Bay, Lower	172
San Francisco Bay, South	

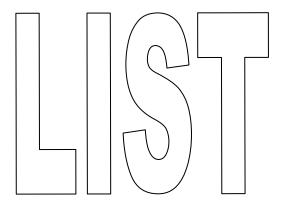


# San Francisco Bay Region (2)



New or Revised Fact Sheets

# San Francisco Bay Region (2)



Recommendations to place waters and pollutants on the section 303(d) List

Water Segment: Lake Chabot (Alameda Co)

Pollutant: Chlordane

**Decision:** List

**Weight of Evidence:** This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

Three of the 9 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
 Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate on particles, in sediment, or bioaccumulate in fish and other aquatic

organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Evaluation Guideline: Total Chlordane 30.0 ng/g - OEHHA Screening Value

(Interim Health Advisory for Hg and PCB, Alameda County) (Brodberg

and Pollock, 1999).

Data Used to Assess Water

Quality:

Three out of 9 samples exceeded. A total of 9 composite samples were

collected and analyzed from Lake Chabot: 3 channel catfish, 3

largemouth bass, and 3 carp. Three carp samples exceeded guideline

(TSMP, 2002).

Spatial Representation: One station.

Temporal Representation: Samples were collected on 4/24/2001 and 6/6/2001.

Data Quality Assessment: Environmental Chemistry Quality Assurance and Data Report for the

Toxic Substances Monitoring Program, 2001-2002. Department of Fish

Water Segment: Lake Chabot (Alameda Co)

Pollutant: DDT

Decision: List

Weight of Evidence: This polluta

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of the 9 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: San Francisco Bay Basin Plan: Many pollutants can accumulate on particles, in sediment, or bioaccumulate in fish and other aquatic organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Evaluation Guideline: Total DDT 100.0 ng/g - OEHHA Screening Value (Brodberg and Pollack,

1999).

Data Used to Assess Water

Quality:

Two out of 9 samples exceeded. A total of 9 composite samples were collected and analyzed from Lake Chabot: 3 channel catfish, 3 largemouth bass, and 3 carp. Two carp samples exceeded guideline

(TSMP, 2002).

Spatial Representation: One station.

Temporal Representation: Samples were collected on 4/24/2001 and 6/6/2001.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish Data Quality Assessment:

Lake Chabot (Alameda Co) **Water Segment:** 

Dieldrin Pollutant:

Decision: List

This pollutant is being considered for placement on the section 303(d) list Weight of Evidence:

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Six of the 9 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

**SWRCB Staff** Recommendation: After review of the available data and information. SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA)

Tissue Matrix:

Water Quality Objective/ Water Quality Criterion:

San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate

on particles, in sediment, or bioaccumulate in fish and other aquatic organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Evaluation Guideline: Dieldrin 2.0 ng/g - OEHHA Screening Value (Brodberg and Pollock,

1999).

Data Used to Assess Water

Quality:

Six out of 9 samples exceeded. A total of 9 composite samples were collected and analyzed from Lake Chabot - 3 channel catfish, 3 largemouth bass, and 3 carp. Three carp and three channel catfish

samples exceeded guideline (TSMP, 2002).

Spatial Representation: One station.

Temporal Representation: Samples were collected on 4/24/2001 and 6/6/2001.

Data Quality Assessment: Environmental Chemistry Quality Assurance and Data Report for the

Toxic Substances Monitoring Program, 2001-2002. Department of Fish

Water Segment: Lake Chabot (Alameda Co)

Pollutant: Mercury

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Six of the 11 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

SWRCB Staff Recommendation:

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

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion:

e/ San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate on particles, in sediment, or bioaccumulate in fish and other aquatic

organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Evaluation Guideline: Hg 0.3 µg/g - OEHHA Screening Value (Brodberg and Pollock, 1999).

Data Used to Assess Water

Quality:

Six out of 11 samples exceeded. A total of 11 composite samples were collected and analyzed from Lake Chabot - 3 black crappie, 1 channel catfish, 3 largemouth bass, and 3 goldfish. Three goldfish and two largemouth bass samples exceeded the guideline (TSMP, 2002).

Spatial Representation: One station.

Temporal Representation: Samples were collected on 4/24/2001 and 6/6/2001.

Data Quality Assessment:

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

Lake Chabot (Alameda Co) **Water Segment:** 

Polychlorinated biphenyls Pollutant:

Decision: List

This pollutant is being considered for placement on the section 303(d) list Weight of Evidence:

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Five of the 9 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

**SWRCB Staff** Recommendation: After review of the available data and information. SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA)

Tissue Matrix:

Water Quality Objective/ Water Quality Criterion:

San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate on particles, in sediment, or bioaccumulate in fish and other aquatic

organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Evaluation Guideline: PCB 20.0 ng/g - OEHHA Screening Value (Interim Health Advisory for Hg

and PCB, Alameda County) (Brodberg and Pollock, 1999).

Data Used to Assess Water

Quality:

Five out of 9 samples exceeded. A total of 9 composite samples were

collected and analyzed from Lake Chabot: 3 channel catfish, 3

largemouth bass, and 3 carp. Two carp and three channel catfish

samples exceeded guideline (TSMP, 2002).

Spatial Representation: One station.

Samples were collected on 4/24/2001 and 6/6/2001. Temporal Representation:

Data Quality Assessment:

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

Water Segment: Pacific Ocean at Pillar Point

Pollutant: Mercury

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

Olicy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of

the Policy.

3. Three of the 5 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: From the California Ocean Plan: The concentration of organic materials in fish, shellfish or other marine resources used for human consumption

shall not bioaccumulate to levels that are harmful to human health

(SWRCB, 2001).

Evaluation Guideline: Mercury 0.3 μg/g (OEHHA Screening Value) (Brodberg & Pollock, 1999).

Data Used to Assess Water

Quality:

Three out of 5 samples exceeded. Five filet composite samples were collected from the following species: brown rockfish, lingcod, rosethorn rockfish, black rockfish, and spotfin surfperch. Brown rockfish, rosethorn

rockfish, and lingcod exceeded guideline (TSMP, 2002).

Spatial Representation: One station was sampled: San Mateo Coast.

Temporal Representation: Samples were collected on May 9, 22 and 23, 2000.

Data Quality Assessment:

Data and Quality Assurance/Quality Control Report For Trace Metals - Coastal Fish Contaminant Project Year 2, 1999-2000. Department of Fish and Game.

Water Segment: Stevens Creek Reservoir

Pollutant: Chlordane

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three of the 6 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate on particles, in sediment, or bioaccumulate in fish and other aquatic

organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Evaluation Guideline: 30.0 ng/g Total Chlordane - OEHHA Screening Value (Brodberg and

Pollock, 1999).

Data Used to Assess Water

Quality:

Three out of 6 samples exceeded. A total of 6 composite samples were collected and analyzed from Stevens Creek Reservoir. There were 3 channel catfish and 3 largemouth bass. Three channel catfish samples

exceeded the guideline (TSMP, 2002).

One station located off the point on the west shore of the lake 600 yards Spatial Representation:

upstream of the dam.

Samples were collected on 5/4/2001 and 6/6/2001. Temporal Representation:

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish Data Quality Assessment:

Stevens Creek Reservoir **Water Segment:** 

Dieldrin Pollutant:

Decision: List

This pollutant is being considered for placement on the section 303(d) list Weight of Evidence:

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three of the 6 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/

San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate Water Quality Criterion: on particles, in sediment, or bioaccumulate in fish and other aquatic

organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Evaluation Guideline: 2.0 ng/g Dieldrin - OEHHA Screening Value (Brodberg & Pollock, 1999).

Data Used to Assess Water

Quality:

Three out of 6 samples exceeded. A total of 6 composite samples were collected and analyzed from Stevens Creek Reservoir. There were 3

channel catfish and 3 largemouth bass. Three channel catfish samples exceeded guideline (TSMP, 2002).

Spatial Representation: One station located off the point on the west shore of the lake 600 yards upstream of the dam.

Samples were collected on 5/4/2001 and 6/6/2001. Temporal Representation:

Data Quality Assessment:

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

Water Segment: Stevens Creek Reservoir

Pollutant: Mercury

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Nine of the 10 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate on particles, in sediment, or bioaccumulate in fish and other aquatic

organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Evaluation Guideline: 0.3 μg/g Hg - OEHHA Screening Value (Interim Health Advisory for Hg

and PCB, Santa Clara County) (Brodberg & Pollock, 1999).

Data Used to Assess Water

Quality:

Nine out of 10 samples exceeded. A total of 7 composite samples, 4 black crappie and 3 largemouth bass, along with 3 individual samples of

channel catfish were collected and analyzed from Stevens Creek

Reservoir. One channel catfish sample did not exceed guideline (TSMP,

2002).

Spatial Representation: One station located off the point on the west shore of the lake 600 yards

upstream of the dam.

Temporal Representation: Samples were collected on 5/4/2001 and 6/6/2001.

Data Quality Assessment: Environmental Chemistry Quality Assurance and Data Report for the

Toxic Substances Monitoring Program, 2001-2002. Department of Fish

Water Segment: Stevens Creek Reservoir

**Pollutant:** Polychlorinated biphenyls

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Six of the 6 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion:

y Objective/ San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate on particles, in sediment, or bioaccumulate in fish and other aquatic

organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Evaluation Guideline: 20.0 ng/g PCB - OEHHA Screening Value (Interim Health Advisory for Hg

and PCB, Santa Clara County) (Brodberg & Pollock, 1999).

Data Used to Assess Water

Quality:

Six out of 6 samples exceeded. A total of 6 composite samples were collected and analyzed from Stevens Creek Reservoir. There were 3

channel catfish and 3 largemouth bass. All exceeded guideline (TSMP,

2002).

One station located off the point on the west shore of the lake 600 yards Spatial Representation:

upstream of the dam.

Samples were collected on 5/4/2001 and 6/6/2001. Temporal Representation:

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish Data Quality Assessment:

# San Francisco Bay Region (2)

# LIST AS BEING ADDRESSED

Recommendations to place waters and pollutants on the Being Addressed category of the section 303(d) List

Water Segment: Lagunitas Creek

Pollutant: Pathogens

**Decision:** List in Being Addressed Category

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Data Used to Assess Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Tomales Bay Pathogens TMDL was approved by RWQCB in September of 2005 and subsequently approved

by USEPA.

Water Segment: Stege Marsh

Pollutant: Chlordane

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under sections 2.2, 3.6, and 3.10

of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status while under section 3.10, a minimum of two lines of

evidence are needed to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.6 the site has significant sediment toxicity and the pollutant is likely to cause or contribute to the toxic effect. The benthic community is impacted and may be impacted by this pollutant. The RWQCB has adopted a cleanup order that will result in attainment of the water quality standard.

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

This conclusion is based on the staff findings that:

- 1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. Three of 3 samples exceeded the 6 ng/g ERM sediment quality guideline, 5 of 5 samples exhibit toxicity, and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The benthic community in this water body is impacted and this pollutant is associated with this impact.
- 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

## SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because applicable water quality standards are exceeded and another program is addressing the problem.

#### Lines of Evidence:

Numeric Line of EvidencePollutant-SedimentBeneficial Use:WE - Wetland Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism,

population, or community.

Evaluation Guideline: ERM of 6 ng/g used (Long and Morgan, 1990).

Data Used to Assess Water

Quality:

Three of 3 samples exceeded the 6 ng/g ERM sediment quality guideline

(Hunt et al., 1988b).

Spatial Representation: Data was synoptically collected with benthic community and toxicity

measurements.

Temporal Representation: Data was collected from 10/97-12/97.

Data Quality Assessment: Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines

for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to

list a water body.

Numeric Line of Evidence Toxicity

Beneficial Use: WE - Wetland Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of

the health of an organism, population, or community.

Evaluation Guideline: BPTCP reference envelope approach.

Data Used to Assess Water

Quality:

There was 0-1% amphipod survival in 5 of 5 tests. Three of 3 samples with significant urchin toxicity (Hunt et al., 1988b).

Spatial Representation: Data was spatially collected.

Temporal Representation: Data was collected from 10/97-12/97.

Data Quality Assessment: Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines

for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to

list a water body.

Numeric Line of Evidence Population/Community Degradation

Beneficial Use: WE - Wetland Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of

the health of an organism, population, or community.

Evaluation Guideline: Evaluation of the benthic data was completed using the approaches

developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the

benthic community.

Data Used to Assess Water

Quality:

Relative benthic index = 0.00 (2 benthic samples); (Hunt et al., 1998).

Spatial Representation: Data was spatially collected.

Temporal Representation: Data was collected from 10/97-12/97.

Data Quality Assessment: Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines

for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to

list a water body.

Line of Evidence Remedial Program in Place

Beneficial Use WE - Wetland Habitat

Information Used to Assess

Water Quality:

Stege Marsh is identified as a toxic hot spot in the SWRCB Consolidated Toxic Hot Spot Cleanup Plan (SWRCB Resolution No. 99-065). This plan

is being implemented by the San Francisco Bay RWQCB through

Cleanup and Abatement Orders.

Water Segment: Stege Marsh

Pollutant: Copper

**Decision:** List in Being Addressed Category

Weight of Evidence:

This pollutant is being considered for listing under sections 2.2, 3.6, and 3.10 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status while under section 3.10, a minimum of two lines of evidence are needed to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.6 the site has significant sediment toxicity and the pollutant is likely to cause or contribute to the toxic effect. The benthic community is impacted and may be impacted by this pollutant. The RWQCB has adopted a cleanup order that will result in attainment of the water quality standard.

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

This conclusion is based on the staff findings that:

- 1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. Three of 3 samples exceeded the 270  $\mu$ g/g ERM sediment quality guideline, 5 of 5 samples exhibit toxicity, and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The benthic community in this water body is impacted and this pollutant is associated with this impact. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

## SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because applicable water quality standards are exceeded and another program is addressing the problem.

#### Lines of Evidence:

Numeric Line of EvidencePollutant-SedimentBeneficial Use:WE - Wetland Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism,

population, or community.

Evaluation Guideline: ERM of 270 μg/g was used (Long et al., 1995).

Data Used to Assess Water

Quality:

Three of 3 samples exceeded 270 µg/g ERM sediment quality guideline

(Hunt et al., 1988b).

Spatial Representation: Data was synoptically collected with benthic community and toxicity

measurements.

Temporal Representation: Data was collected from 10/97-12/97.

Data Quality Assessment: Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines

for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to

list a water body.

Numeric Line of Evidence Toxicity

Beneficial Use: WE - Wetland Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of

the health of an organism, population, or community.

Evaluation Guideline: BPTCP reference envelope approach.

Data Used to Assess Water

Quality:

There was 0-1% amphipod survival in 5 of 5 tests. Three of 3 samples

with significant urchin toxicity (Hunt et al., 1988b).

Spatial Representation: Data was spatially collected.

Temporal Representation: Data was collected from 10/97-12/97.

Data Quality Assessment: Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines

for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to

list a water body.

Numeric Line of Evidence Population/Community Degradation

Beneficial Use: WE - Wetland Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of

the health of an organism, population, or community.

Evaluation Guideline: Evaluation of the benthic data was completed using the approaches

developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the

benthic community.

Data Used to Assess Water

Quality:

Relative benthic index = 0.00 (2 benthic samples); (Hunt et al., 1998).

Spatial Representation: Data was spatially collected.

Temporal Representation: Data was collected from 10/97-12/97.

Data Quality Assessment: Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines

for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to

list a water body.

**Line of Evidence** Remedial Program in Place

Beneficial Use WE - Wetland Habitat

Information Used to Assess

Water Quality:

Stege Marsh is identified as a toxic hot spot in the SWRCB Consolidated Toxic Hot Spot Cleanup Plan (SWRCB Resolution No. 99-065). This plan

is being implemented by the San Francisco Bay RWQCB through

Cleanup and Abatement Orders.

Water Segment: Stege Marsh

Pollutant: Dacthal

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under sections 2.2, 3.6, and 3.10

of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status while under section 3.10, a minimum of two lines of

evidence are needed to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.6 the site has significant sediment toxicity and it cannot be determined if the pollutant is likely to cause or contribute to the toxic effect. The benthic community is impacted but it is unknown if it is impacted by this pollutant. The RWQCB has adopted a cleanup order that will result in attainment of the water quality standard.

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

This conclusion is based on the staff findings that:

- 1. A sediment quality guideline is not available that complies with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. Three of 3 samples exhibited significant urchin toxicity. The water body appears to have toxicity and the pollutant may be contributing to or causing this toxicity.
- 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved.

#### Lines of Evidence:

Numeric Line of EvidencePollutant-SedimentBeneficial Use:WE - Wetland Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community

composition, or any other relevant measure of the health of an organism,

population, or community.

Evaluation Guideline: No applicable sediment guideline is available.

Data Used to Assess Water

Quality:

Five samples ranging in concentration from ND to 11.1 ng/g (Hunt et al.,

1988b).

Spatial Representation: Data was synoptically collected with benthic community and toxicity

measurements.

Temporal Representation: Data was collected from 10/97-12/97.

Data Quality Assessment: Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines

for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to

list a water body.

Numeric Line of Evidence Toxicity

Beneficial Use: WE - Wetland Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of

the health of an organism, population, or community.

Evaluation Guideline: BPTCP reference envelope approach.

Data Used to Assess Water

Data Quality Assessment:

Quality:

There was 0-1% amphipod survival in 5 of 5 tests. Three of 3 samples

with significant urchin toxicity (Hunt et al., 1988b).

Spatial Representation: Data was spatially collected.

Temporal Representation: Data was collected from 10/97-12/97.

Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to

list a water body.

Numeric Line of Evidence Population/Community Degradation

Beneficial Use: WE - Wetland Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of

the health of an organism, population, or community.

Evaluation Guideline: Evaluation of the benthic data was completed using the approaches

developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the

benthic community.

Data Used to Assess Water

Quality:

Relative benthic index = 0.00 (2 benthic samples); (Hunt et al., 1998).

Spatial Representation: Data was spatially collected.

Temporal Representation: Data was collected from 10/97-12/97.

Data Quality Assessment: Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines

for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to

list a water body.

Line of Evidence Remedial Program in Place

Beneficial Use WE - Wetland Habitat

Information Used to Assess

Water Quality:

Stege Marsh is identified as a toxic hot spot in the SWRCB Consolidated Toxic Hot Spot Cleanup Plan (SWRCB Resolution No. 99-065). This plan

is being implemented by the San Francisco Bay RWQCB through

Cleanup and Abatement Orders.

Water Segment: Stege Marsh

Pollutant: Dieldrin

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under sections 2.2, 3.6, and 3.10

of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status while under section 3.10, a minimum of two lines of

evidence are needed to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.6 the site has significant sediment toxicity and the pollutant is likely to cause or contribute to the toxic effect. The benthic community is impacted and may be impacted by this pollutant.

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

This conclusion is based on the staff findings that:

- 1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. Two of 3 samples exceeded the sediment guideline, 5 of 5 samples exhibit toxicity, and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The benthic community in this water body is impacted and this pollutant is associated with this impact.
- 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

## SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because applicable water quality standards are exceeded and another program is addressing the problem.

#### Lines of Evidence:

Numeric Line of EvidencePollutant-SedimentBeneficial Use:WE - Wetland Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community

composition, or any other relevant measure of the health of an organism,

population, or community.

Evaluation Guideline: ERM of 8 ng/g was used (Long et al., 1995).

Data Used to Assess Water

Quality:

Two of 3 samples exceeded the ERM sediment quality guideline (Hunt et

al., 1988b).

Spatial Representation: Data was synoptically collected with benthic community and toxicity

measurements.

Temporal Representation: Data was collected from 10/97-12/97.

Data Quality Assessment: Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines

for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to

list a water body.

Numeric Line of Evidence Toxicity

Beneficial Use: WE - Wetland Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of

the health of an organism, population, or community.

Evaluation Guideline: BPTCP reference envelope approach.

Data Used to Assess Water

Data Quality Assessment:

Quality:

There was 0-1% amphipod survival in 5 of 5 tests. Three of 3 samples

with significant urchin toxicity (Hunt et al., 1988b).

Spatial Representation: Data was spatially collected.

Temporal Representation: Data was collected from 10/97-12/97.

Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to

list a water body.

Numeric Line of Evidence Population/Community Degradation

Beneficial Use: WE - Wetland Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of

the health of an organism, population, or community.

Evaluation Guideline: Evaluation of the benthic data was completed using the approaches

developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the

benthic community.

Data Used to Assess Water

Quality:

Relative benthic index = 0.00 (2 benthic samples); (Hunt et al., 1998).

Spatial Representation: Data was spatially collected.

Temporal Representation: Data was collected from 10/97-12/97.

Data Quality Assessment: Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines

for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to

list a water body.

Line of Evidence Remedial Program in Place

Beneficial Use WE - Wetland Habitat

Information Used to Assess

Water Quality:

Stege Marsh is identified as a toxic hot spot in the SWRCB Consolidated Toxic Hot Spot Cleanup Plan (SWRCB Resolution No. 99-065). This plan

is being implemented by the San Francisco Bay RWQCB through

Cleanup and Abatement Orders.

Water Segment: Stege Marsh

Pollutant: Mercury

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under sections 2.2, 3.6, and 3.10

of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status while under section 3.10, a minimum of two lines of

evidence are needed to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.6 the site has significant sediment toxicity and the pollutant is likely to cause or contribute to the toxic effect. The benthic community is impacted and may be impacted by this pollutant. The RWQCB has adopted a cleanup order that will result in attainment of the water quality standard.

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

This conclusion is based on the staff findings that:

- 1. The sediment quality guideline used complies, with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. Two of 3 samples exceeded the sediment guideline, 5 of 5 samples exhibit toxicity, and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The benthic community in this water body is impacted and this pollutant is associated with this impact.
- 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

## SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because applicable water quality standards are exceeded and another program is addressing the problem.

#### Lines of Evidence:

Numeric Line of EvidencePollutant-SedimentBeneficial Use:WE - Wetland Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism,

population, or community.

Evaluation Guideline: Sediment guideline of 2.1 µg/g was used (PTI Environmental Services,

1991).

Data Used to Assess Water

Quality:

Two of 3 samples exceeded guideline (Hunt et al., 1988b).

Spatial Representation: Data was synoptically collected with benthic community and toxicity

measurements.

Temporal Representation: Data was collected from 10/97-12/97.

Data Quality Assessment: Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines

for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to

list a water body.

Numeric Line of Evidence Toxicity

Beneficial Use: WE - Wetland Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of

the health of an organism, population, or community.

Evaluation Guideline: BPTCP reference envelope approach.

Data Used to Assess Water

Quality:

There was 0-1% amphipod survival in 5 of 5 tests. Three of 3 samples

with significant urchin toxicity (Hunt et al., 1988b).

Spatial Representation: Data was spatially collected.

Temporal Representation: Data was collected from 10/97-12/97.

Data Quality Assessment: Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines

for 305(b) reports, that uses a hierarchy of water quality data levels. Only

data of higher overall level of information (Levels 3 and 4) were used to list a water body.

Numeric Line of Evidence

Population/Community Degradation

Beneficial Use:

WE - Wetland Habitat

Matrix:

Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of

the health of an organism, population, or community.

Evaluation Guideline:

Evaluation of the benthic data was completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community.

Data Used to Assess Water

Quality:

Relative benthic index = 0.00 (2 benthic samples); (Hunt et al., 1998).

Spatial Representation: Data was spatially collected.

Temporal Representation: Data was collected from 10/97-12/97.

Data Quality Assessment: Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines

for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to

list a water body.

Line of Evidence Remedial Program in Place

Beneficial Use WE - Wetland Habitat

Information Used to Assess

Water Quality:

Stege Marsh is identified as a toxic hot spot in the SWRCB Consolidated Toxic Hot Spot Cleanup Plan (SWRCB Resolution No. 99-065). This plan

is being implemented by the San Francisco Bay RWQCB through

Cleanup and Abatement Orders.

Water Segment: Stege Marsh

Pollutant: Polychlorinated biphenyls

**Decision:** List in Being Addressed Category

Weight of Evidence:

This pollutant is being considered for listing under sections 2.2, 3.6, and 3.10 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status while under section 3.10, a minimum of two lines of evidence are needed to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.6 the site has significant sediment toxicity and the pollutant is likely to cause of contribute to the toxic effect. The benthic community is impacted and may be impacted by this pollutant. The RWQCB has adopted a cleanup order that will result in attainment of the water quality standard.

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

This conclusion is based on the staff findings that:

- 1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. Two of 3 samples exceeded the sediment guideline, 5 of 5 samples exhibit toxicity, and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The benthic community in this water body is impacted and this pollutant is associated with this impact.
- 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

## SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because applicable water quality standards are exceeded and another program is addressing the problem.

#### **Lines of Evidence:**

Numeric Line of EvidencePollutant-SedimentBeneficial Use:WE - Wetland Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of

the health of an organism, population, or community.

Evaluation Guideline: Sediment guideline of 400 ng/g for PCBs was used (MacDonald et al.,

2000).

Data Used to Assess Water

Quality:

Two of 3 samples exceeded sediment guideline (Hunt et al., 1998b).

Spatial Representation: Data were synoptically collected with benthic community and toxicity

measurements.

Temporal Representation: Data were collected from 10/97-12/97.

Data Quality Assessment: Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines

for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to

list a water body.

Numeric Line of Evidence Toxicity

Beneficial Use: WE - Wetland Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of

the health of an organism, population, or community.

Evaluation Guideline: BPTCP reference envelope approach.

Data Used to Assess Water

Quality:

There was 0-1% amphipod survival in 5 of 5 tests. Three of 3 samples

with significant urchin toxicity (Hunt et al., 1988b).

Spatial Representation: Data was spatially collected.

Temporal Representation: Data was collected from 10/97-12/97.

Data Quality Assessment: Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines

for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to

list a water body.

Numeric Line of Evidence Population/Community Degradation

Beneficial Use: WE - Wetland Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of

the health of an organism, population, or community.

Evaluation Guideline: Evaluation of the benthic data was completed using the approaches

developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the

benthic community.

Data Used to Assess Water

Quality:

Relative benthic index = 0.00 (2 benthic samples); (Hunt et al., 1998).

Spatial Representation: Data was spatially collected.

Temporal Representation: Data was collected from 10/97-12/97.

Data Quality Assessment: Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines

for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to

list a water body.

Line of Evidence Remedial Program in Place

Beneficial Use WE - Wetland Habitat

Information Used to Assess

Water Quality:

Stege Marsh is identified as a toxic hot spot in the SWRCB Consolidated Toxic Hot Spot Cleanup Plan (SWRCB Resolution No. 99-065). This plan

is being implemented by the San Francisco Bay RWQCB through

Cleanup and Abatement Orders.

Water Segment: Stege Marsh

Pollutant: Zinc

**Decision:** List in Being Addressed Category

Weight of Evidence:

This pollutant is being considered for listing under sections 2.2, 3.6, and 3.10 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status while under section 3.10, a minimum of two lines of evidence are needed to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.6 the site has significant sediment toxicity and the pollutant is likely to cause or contribute to the toxic effect. The benthic community is impacted and may be impacted by this pollutant. The RWQCB has adopted a cleanup order that will result in attainment of the water quality standard.

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

This conclusion is based on the staff findings that:

- 1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. Two of 3 samples exceeded the sediment guideline, 5 of 5 samples exhibit toxicity, and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The benthic community in this water body is impacted and this pollutant is associated with this impact.
- 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

## SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because applicable water quality standards are exceeded and another program is addressing the problem.

#### Lines of Evidence:

Numeric Line of EvidencePollutant-SedimentBeneficial Use:WE - Wetland Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of

the health of an organism, population, or community.

Evaluation Guideline: ERM of 410 μg/g used (Long et al., 1995).

Data Used to Assess Water

Quality:

Two of 3 samples exceed ERM (Hunt et al., 1988b).

Spatial Representation: Data was synoptically collected with benthic community and toxicity

measurements.

Temporal Representation: Data was collected from 10/97-12/97.

Data Quality Assessment: Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines

for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to

list a water body.

Numeric Line of Evidence Toxicity

Beneficial Use: WE - Wetland Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of

the health of an organism, population, or community.

Evaluation Guideline: BPTCP reference envelope approach.

Data Used to Assess Water

Quality:

There was 0-1% amphipod survival in 5 of 5 tests. Three of 3 samples

with significant urchin toxicity (Hunt et al., 1988b).

Spatial Representation: Data was spatially collected.

Temporal Representation: Data was collected from 10/97-12/97.

Data Quality Assessment: Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines

for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to

list a water body.

Numeric Line of Evidence Population/Community Degradation

Beneficial Use: WE - Wetland Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of

the health of an organism, population, or community.

Evaluation Guideline: Evaluation of the benthic data was completed using the approaches

developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the

benthic community.

Data Used to Assess Water

Quality:

Relative benthic index = 0.00 (2 benthic samples); (Hunt et al., 1998).

Spatial Representation: Data was spatially collected.

Temporal Representation: Data was collected from 10/97-12/97.

Data Quality Assessment: Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines

for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to

list a water body.

Line of Evidence Remedial Program in Place

Beneficial Use WE - Wetland Habitat

Information Used to Assess

Water Quality:

Stege Marsh is identified as a toxic hot spot in the SWRCB Consolidated Toxic Hot Spot Cleanup Plan (SWRCB Resolution No. 99-065). This plan

is being implemented by the San Francisco Bay RWQCB through

Cleanup and Abatement Orders.

Water Segment: Tomales Bay

Pollutant: Pathogens

**Decision:** List in Being Addressed Category

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

**Line of Evidence** Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA), ES - Estuarine Habitat

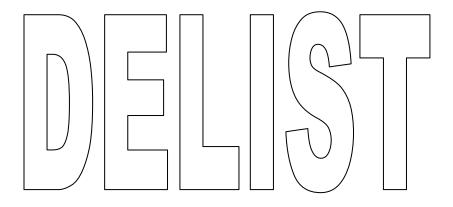
Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Tomales Bay Pathogens TMDL was approved by RWQCB in September of 2005 and subsequently approved

by USEPA.

# San Francisco Bay Region (2)



Recommendations to remove waters and pollutants from the section 303(d) List

Water Segment: San Francisco Bay, Lower

Pollutant: Nickel

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

Policy. Under section 4.1 a single line of evidence is necessary to assess

listing status.

One line of evidence is available in the administrative record to assess this

pollutant.

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

Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 70 samples exceeded the water quality objective; therefore the allowable frequency listed in Table 4.1 of the Listing Policy was not exceeded.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

After review of the available data and information, State Water Board staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards have not

been exceeded. .

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: ES - Estuarine Habitat

Matrix: Water

Water Quality Objective/ The Regional Water Board Basin Plan contains water quality objectives Water Quality Criterion: for nickel in San Francisco Bay - Lower of 8.2µg/L, 4-day average and,

74μg/L 1-hour average. These objectives were approved by USEPA in January 2005 and are contained in the Regional Board Basin Plan in

Table 3-3.

Data Used to Assess Water

Quality:

Taken from the San Francisco Bay Estuary Institute (SFEI) - Regional

Monitoring Program (RMP). None of the 70 samples exceeded the site-

specific water quality objective

Spatial Representation: 21 sampling locations

Temporal Representation: Samples were taken from 1993 to 2003 with three samples taken each

year, on average. A total of 70 samples were taken during the

aforementioned time period.

QA/QC Equivalent: SFEI RMP OA/QC program

Page left blank intentionally.

## San Francisco Bay Region (2)

# Original Fact Sheets

Fact Sheets Not Changed from September 2005 Version

# San Francisco Bay Region (2)



Recommendations to place waters and pollutants on the section 303(d) List

Water Segment: Anderson Reservoir

Pollutant: Mercury

Decision: List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Seven out of 9 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate on particles, in sediment, or bioaccumulate in fish and other aquatic organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Evaluation Guideline: 0.3 µg/g Hg (OEHHA Screening Value) (Brodberg and Pollock, 1999).

Data Used to Assess Water

Quality:

Seven out of 9 samples exceeded. A total of 9 composite samples were collected and analyzed from Anderson Reservoir: 3 black crappie, 3 carp, and 3 largemouth bass. Two black crappie samples did not exceed

(TSMP, 2002).

Spatial Representation: One station located near the face of dam.

Temporal Representation: All samples were collected on 9/13/2001.

Data Quality Assessment:

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish and Game.

Anderson Reservoir **Water Segment:** 

Polychlorinated biphenyls Pollutant:

Decision: List

This pollutant is being considered for placement on the section 303(d) list Weight of Evidence:

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three out of 6 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA)

Tissue Matrix:

Water Quality Objective/ Water Quality Criterion:

San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate on particles, in sediment, or bioaccumulate in fish and other aquatic

organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Evaluation Guideline: PCB 20.0 ng/g (OEHHA Screening Value) (Brodberg and Pollock, 1999).

Data Used to Assess Water

Quality:

Three out of 6 samples exceeded. A total of 6 composite samples were collected and analyzed from Anderson Reservoir - 3 black crappie and 3

carp. All carp samples exceeded guideline (TSMP, 2002).

One station located near the face of dam. Spatial Representation:

Temporal Representation: All samples were collected on 9/13/2001.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish and Game. Data Quality Assessment:

Bon Tempe Reservoir **Water Segment:** 

Mercury Pollutant:

Decision: List

This pollutant is being considered for placement on the section 303(d) list Weight of Evidence:

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

2. The data used satisfies the data quantity requirements of section 6.1.5 of

the Policy.

3. Two of the 2 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion:

San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate on particles, in sediment, or bioaccumulate in fish and other aquatic

organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Evaluation Guideline: Mercury 0.3 µg/g - OEHHA Screening Value (Interim Health Advisory for

Hg, Marin County) (Brodberg and Pollock, 1999).

Data Used to Assess Water

Quality:

Two out of 2 samples exceeded. Two individual samples of largemouth bass were collected and analyzed from Bon Tempe Reservoir. Both

exceeded the guideline (TSMP, 2002).

One station located around the shoreline of the lake. Spatial Representation:

Temporal Representation: All samples were collected on 9/20/2001.

Data Quality Assessment:

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish and Game.

Water Segment: Del Valle Reservoir

Pollutant: Mercury

**Decision:** List

Weight of Evidence: This pol

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Four of the 12 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate on particles, in sediment, or bioaccumulate in fish and other aquatic organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Evaluation Guideline: OEHHA Screening Value of 0.3 μg/g for mercury (Brodberg and Pollock,

1999).

Data Used to Assess Water

Quality:

Four out of 12 samples exceeded. A total of 12 composite samples were collected and analyzed from Del Valle Reservoir - 3 bluegill, 3 channel catfish, 3 largemouth bass, and 3 redear sunfish. One catfish and all three largemouth bass samples exceeded the Hg guideline (TSMP,

2002).

One station located in upper end of reservoir south of boat ramp. Spatial Representation:

All samples were collected on 4/25/2001. Temporal Representation:

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish Data Quality Assessment:

and Game.

Water Segment: Del Valle Reservoir

**Pollutant:** Polychlorinated biphenyls

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

Olicy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of

the Policy.

3. Three of the 3 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate Water Quality Criterion: on particles, in sediment, or bioaccumulate in fish and other aquatic

on particles, in sediment, or bioaccumulate in fish and other aquatic organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Evaluation Guideline: 20.0 ng/g PCB - OEHHA Screening Value (Interim Health Advisory for Hg

and PCB, Alameda County) (Brodberg and Pollock, 1999).

Data Used to Assess Water

Quality:

Three out of 3 samples exceeded. A total of 3 channel catfish composite

samples were collected and analyzed from Del Valle Reservoir. All

samples exceeded guideline (TSMP, 2002).

Spatial Representation: One station located in upper end of reservoir south of boat ramp.

Temporal Representation: All samples were collected on 4/25/2001.

Data Quality Assessment:

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish and Game.

Water Segment: Islais Creek

Pollutant: Sediment Toxicity

Decision: List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 a water segment can be placed on the 303(d) list if the water segment exhibits significant toxicity and the observed toxicity is associated with a pollutant or pollutants. Under section 3.6 a water body segment may also be listed for toxicity alone.

Three lines of evidence are available in the administrative record to assess this pollutant. A sufficient number of toxicity samples exceed the water quality guidelines.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Ten of 22 samples exhibited significant amphipod toxicity, 4 of 5 samples exhibited significant sea urchin toxicity, the benthic community is considered to be degraded and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### **Lines of Evidence:**

**Numeric Line of Evidence** Population/Community Degradation

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a

detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism.

population, or community.

Evaluation Guideline: Evaluation of the benthic data were completed using the approaches

developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the

benthic community.

Data Used to Assess Water

Quality:

Relative benthic index = 0.22, 0.25, 0.43 (3 benthic gradient samples)

(Hunt et al., 1998b).

Spatial Representation: Data was synoptically collected with benthic community and toxicity

measurements over the length of the creek.

Temporal Representation: Data was collected from 9/94 - 9/97.

Data Quality Assessment: BPTCP Quality Assurance Project Plan.

**Numeric Line of Evidence** Toxicity

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms (SFBRWQCB, 1995).

Evaluation Guideline: BPTCP Reference envelope approach used.

Data Used to Assess Water

Quality:

Significant amphipod toxicity in 3 of 4 samples (75%). Significant urchin

toxicity in 4 of 5 samples (80%) (Hunt et al., 1998b).

Spatial Representation: Data was synoptically collected with benthic community and toxicity

measurements over the length of the creek.

Temporal Representation: Data was collected from 9/94 - 9/97.

Data Quality Assessment: BPTCP Quality Assurance Project Plan (Stephenson et al., 1994).

Numeric Line of Evidence Toxicity

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms (SFBRWQCB, 1995).

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism,

population, or community.

Evaluation Guideline: BPTCP Reference envelope approach used.

Data Used to Assess Water Significant amphipod toxicity in 7 of 18 samples (Battelle Memorial

Quality: Institute, 2002).

Spatial Representation: Data was synoptically collected with benthic community and toxicity

measurements over the length of the creek.

Temporal Representation: Data were collected between 1998 and 2000.

Environmental Conditions: Samples were collected in both wet and dry seasons.

Data Quality Assessment: Methods used were equivalent to those used in the BPTCP QAPP

(Stephenson, et al., 1994). All reported data met QA requirements.

Lafayette Reservoir **Water Segment:** 

Mercury Pollutant:

Decision: List

This pollutant is being considered for placement on the section 303(d) list Weight of Evidence:

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Five of the 10 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/

San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate Water Quality Criterion: on particles, in sediment, or bioaccumulate in fish and other aquatic

organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Evaluation Guideline: 0.3 µg/g Hg - OEHHA Screening Value (Interim Health Advisory for Hg

and PCB, Contra Costa County) (Brodberg and Pollock, 1999).

Data Used to Assess Water

Quality:

Five out of 10 samples exceeded. A total of 10 composite samples were collected and analyzed from Lafayette Reservoir - 3 black crappie, 1 channel catfish, 3 largemouth bass, and 3 goldfish. Three goldfish and two largemouth bass samples exceeded the guideline (TSMP, 2002).

Spatial Representation: One station located on the lake.

All samples were collected on 9/9/2002. Temporal Representation:

Data Quality Assessment:

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

and Game.

Water Segment: Lafayette Reservoir

**Pollutant:** Polychlorinated biphenyls

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of the 3 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate on particles, in sediment, or bioaccumulate in fish and other aquatic organisms. Controllable water quality factors shall not cause a

organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Evaluation Guideline: 20.0 ng/g PCB - OEHHA Screening Value (Interim Health Advisory for Hg

and PCB, Contra Costa County) (Brodberg and Pollock, 1999).

Data Used to Assess Water

Quality:

Two out of 3 samples exceeded. A total of 3 composite samples were collected and analyzed from Lafayette Reservoir - 1 each: channel catfish, goldfish, and largemouth bass. Channel catfish and goldfish

samples exceeded guideline (TSMP, 2002).

Spatial Representation: One station located on the lake.

Temporal Representation: All samples were collected on 9/9/2002.

Data Quality Assessment:

Environmental Chemical Quality Assurance and Data Report for the Toxic Substances Monitoring Program. 2001-2002. Department of Fish

and Game.

Nicasio Reservoir **Water Segment:** 

Mercury Pollutant:

Decision: List

This pollutant is being considered for placement on the section 303(d) list Weight of Evidence:

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of the 9 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/

San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate Water Quality Criterion: on particles, in sediment, or bioaccumulate in fish and other aquatic

organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Evaluation Guideline: OEHHA Screening Value of 0.3 μg/g for mercury (Brodberg & Pollock,

1999).

Data Used to Assess Water

Quality:

Two out of 9 samples exceeded. A total of 9 composite samples were collected and analyzed from Nicasio Reservoir: 3 bluegill, 3 carp, and 3

largemouth bass. Two largemouth bass samples exceeded guideline

(TSMP, 2002).

Spatial Representation: One station.

Temporal Representation: All samples were collected on 9/19/2001.

Data Quality Assessment:

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

and Game.

Water Segment: Oakland Inner Harbor (Fruitvale Site, part of SF Bay, Central)

Pollutant: Sediment Toxicity

**Decision:** List

**Weight of Evidence:** Toxicity is being considered for placement on the section 303(d) list under

section 3.6 of the Listing Policy. Under section 3.6 a minimum of one line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Both amphipod toxicity samples exhibit significant toxicity.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of 4 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism.

population, or community.

Evaluation Guideline: Reference envelope approach used.

Data Used to Assess Water

Quality:

Significant amphipod toxicity in 2 of 2 samples. No significant toxicity in

two urchin toxicity tests (Hunt et al., 1998b).

Spatial Representation: Data were synoptically collected with chemical measurements in

sediments.

Temporal Representation: Data collected between April 1995 and April 1997.

Data Quality Assessment: Methods used were equivalent to those used in the BPTCP QAPP. All

reported data met QA requirements.

Water Segment: San Pablo Reservoir

Pollutant: Chlordane

Decision: List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A sufficient number of samples exceed the 30 ng/L OEHHA tissue screening value of total chlordane. Under section 3.5 of the Listing Policy any water body segment where tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline shall be placed on the section 303(d) list

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Six of 9 samples exceeded the 30 ng/L OEHHA tissue-screening value of total chlordane and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Many pollutants can accumulate on particles, in sediment, or bioaccumulate in fish and other aquatic organisms. Controllable water

quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife, and human health will be considered.

Evaluation Guideline: Total Chlordane 30.0 ng/g - OEHHA Screening Value (Brodberg &

Pollock, 1999).

Data Used to Assess Water

Quality:

Six out of 9 samples exceeded. A total of 9 composite samples were collected and analyzed from San Pablo Reservoir - 3 black crappie, 3

channel catfish and 3 carp. Three carp and three channel catfish

samples exceeded guideline (TSMP, 2002).

Spatial Representation: One station located in upper half of the reservoir

Temporal Representation: All samples were collected on 4/17/2000.

Data Quality Assessment: Environmental Chemistry Quality Assurance and Data Report for the

Toxic Substances Monitoring Program, 2001-2002. Department of Fish

and Game.

San Pablo Reservoir **Water Segment:** 

Dieldrin Pollutant:

Decision: List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Nine of the 9 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Tissue Matrix:

Water Quality Objective/ Water Quality Criterion:

San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate on particles, in sediment, or bioaccumulate in fish and other aquatic organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Evaluation Guideline: Dieldrin 2.0 ng/g (OEHHA Screening Value) (Brodberg & Pollock, 1999).

Data Used to Assess Water

Quality:

Nine out of 9 samples exceeded. A total of 9 composite samples were collected and analyzed from Lake Chabot: 3 channel catfish, 3 largemouth bass, and 3 carp. All samples exceeded guideline (TSMP,

2002).

Spatial Representation: One station located in upper half of the reservoir.

Temporal Representation: All samples were collected on 4/17/2000.

Data Quality Assessment:

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

and Game.

Water Segment: San Pablo Reservoir

Pollutant: Heptachlor epoxide

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Four of the 9 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Many pollutants can accumulate on particles, in sediment, or

Water Quality Criterion: bioaccumulate in fish and other aquatic organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on

aquatic organisms, wildlife, and human health will be considered.

Evaluation Guideline: Heptachlor Epoxide 4.0 ng/g (OEHHA Screening Value).

Data Used to Assess Water

Quality:

Four out of 9 samples exceeded. A total of 9 composite samples were collected and analyzed from San Pablo Reservoir - 3 black crappie, 3

channel catfish and 3 carp. Two carp and two channel catfish samples

exceeded guideline (TSMP, 2002).

Spatial Representation: One station located in upper half of the reservoir.

Temporal Representation: All samples were collected on 4/17/2000.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish and Game. Data Quality Assessment:

Water Segment: San Pablo Reservoir

**Pollutant:** Polychlorinated biphenyls

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Six of the 9 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate on particles, in sediment, or bioaccumulate in fish and other aquatic organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in

bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Evaluation Guideline: PCB 20.0 ng/g (OEHHA Screening Value) (Brodberg & Pollock, 1999).

Data Used to Assess Water

Quality:

Six out of 9 samples exceeded. A total of 9 composite samples were collected and analyzed from San Pablo Reservoir - 3 black crappie, 3 channel catfish and 3 carp. Three carp and three channel catfish

samples exceeded quideline (TSMP, 2002).

Spatial Representation: One station located in upper half of the reservoir.

Temporal Representation: All samples were collected on 4/17/2000.

Data Quality Assessment:

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

and Game.

Water Segment: San Pablo Reservoir

Pollutant: Toxaphene

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Four of the 9 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate Water Quality Criterion: on particles, in sediment, or bioaccumulate in fish and other aquatic

on particles, in sediment, or bioaccumulate in fish and other aquatic organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Evaluation Guideline: Toxaphene 30.0 ng/g (OEHHA Screening Value) (Brodberg & Pollock,

1999).

Data Used to Assess Water

Quality:

Four out of 9 samples exceeded. A total of 9 composite samples were collected and analyzed from San Pablo Reservoir: 3 black crappie, 3 channel catfish and 3 carp. Two carp and two channel catfish samples

exceeded guideline (TSMP, 2002).

Spatial Representation: One station located in upper half of the reservoir.

All samples were collected on 4/17/2000. Temporal Representation:

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish and Game. Data Quality Assessment:

Water Segment: Shadow Cliffs Reservoir

Pollutant: Mercury

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of the 4 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate on particles, in sediment, or bioaccumulate in fish and other aquatic organisms. Controllable water quality factors shall not cause a

organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Evaluation Guideline: OEHHA Screening Value of 0.3 μg/g for mercury (Brodberg & Pollock,

1999).

Data Used to Assess Water

Quality:

Two out of 4 samples exceeded. A total of 2 composite samples, 1 carp and 1 channel catfish, along with 2 individual samples of largemouth bass were collected and analyzed from Shadow Cliffs Reservoir. Both

largemouth bass samples exceeded guideline (TSMP, 2002).

Spatial Representation: One station.

Temporal Representation: All samples were collected on 8/13/2002.

Data Quality Assessment:

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

and Game.

Shadow Cliffs Reservoir **Water Segment:** 

Polychlorinated biphenyls Pollutant:

Decision: List

This pollutant is being considered for placement on the section 303(d) list Weight of Evidence:

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of the 4 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/

San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate Water Quality Criterion: on particles, in sediment, or bioaccumulate in fish and other aquatic

organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Evaluation Guideline: PCB 20.0 ng/g - OEHHA Screening Value (Interim Health Advisory for Hg

and PCB, Alameda County (Brodberg & Pollock, 1999).

Data Used to Assess Water

Quality:

Two out of 2 samples exceeded. A total of 2 composite samples were collected and analyzed from Shadow Cliffs Reservoir - 1 carp and 1

channel catfish. Both samples exceeded guideline (TSMP, 2002).

Spatial Representation: One station. Temporal Representation: All samples were collected on 8/13/2002.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish and Game. Data Quality Assessment:

Water Segment: Soulejule Reservoir

Pollutant: Mercury

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Twelve of the 14 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate on particles, in sediment, or bioaccumulate in fish and other aquatic

organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Evaluation Guideline: Mercury 0.3 μg/g (OEHHA Screening Value).

Data Used to Assess Water

Quality:

Twelve out of 14 samples exceeded. A total of 8 composite samples were collected and analyzed from Soulejule Reservoir - 3 black crappie and 5 largemouth bass. In addition, 4 individual largemouth bass and 2 individual channel catfish were sampled. Two channel catfish samples

did not exceed (TSMP, 2002).

Spatial Representation: One station.

Temporal Representation: All samples were collected on 9/20/2001.

Data Quality Assessment:

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

and Game.

Soulejule Reservoir **Water Segment:** 

Polychlorinated biphenyls Pollutant:

Decision: List

This pollutant is being considered for placement on the section 303(d) list Weight of Evidence:

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

2. The data used satisfies the data quantity requirements of section 6.1.5 of

the Policy.

3. Two of the 2 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion:

San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate on particles, in sediment, or bioaccumulate in fish and other aquatic

organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife,

and human health will be considered.

Mercury 0.3 μg/g (OEHHA Screening Value). Evaluation Guideline:

Data Used to Assess Water

Quality:

Two out of 2 samples exceeded. Representation: two individual channel catfish samples were collected and analyzed from Soulejule Reservoir.

Both channel catfish samples exceeded guideline (TSMP, 2002).

Spatial Representation: One station located on the lake. Temporal Representation: All samples were collected on 9/20/2001.

Data Quality Assessment:

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish and Game.

Water Segment: Stevens Creek

Pollutant: Toxicity

**Decision:** List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Two of 6 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: CO - Cold Freshwater Habitat, MI - Fish Migration, WA - Warm

Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species. There shall be no acute toxicity in ambient waters. Acute toxicity is defined as a median of less than 90 percent survival, or less than 70 percent survival, 10 percent of the time,

of test organisms in a 96-hour static or continuous flow test.

Data Used to Assess Water

Quality:

Two out of six samples displayed significant toxicity in the survival endpoint when compared to the negative control based on a statistical

test with alpha of less than 5%, and less than the evaluation threshold (both criteria were met). The toxic Belleville/Barranca samples of April 2002 and January 2003 were 7 day tests for % survival of Pimephales promelas and Ceriodaphnia dubia, respectively. Please see also the QA qualifier below for the January 2003 toxic Belleville/Barranca sample

(TSMP, 2002).

Spatial Representation: The samples were collected from two stations along Stevens Creek:

Belleville/Barranca and La Avenida. Toxicity was detected in samples

collected from the Belleville/Barranca site.

Temporal Representation: Samples were collected at the two different stations on three dates, June

17, 2002, April 11, 2002, and January 23, 2003, for a total of six samples. Toxicity in the survival endpoint was detected in samples collected in

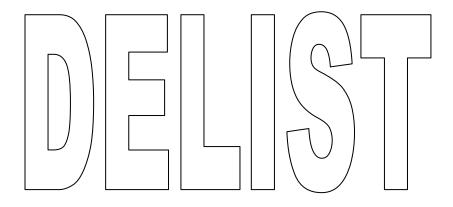
April 2002 and January 2003.

Environmental Conditions: Sub-Basin: Stevens Creek is in the Santa Clara Basin.

Data Quality Assessment: SWAMP QAPP. QA qualifier of Minor deviations in water quality

parameters for the toxic January 2003 Barranca sample.

# San Francisco Bay Region (2)



Recommendations to remove waters and pollutants from the section 303(d) List

Water Segment: Carquinez Strait

Pollutant: Diazinon

**Decision:** Delist

Weight of Evidence:

This pollutant is being considered for removal from the 303(d) list under section 4.6 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. The basis for listing in 1998 was ambient water toxicity and detections of diazinon in Bay waters. In the current assessment, the evaluation guideline available may not satisfy the requirements of the Listing Policy but even if the guideline were used all measurements are much lower than the recommended concentration. Recent measures of toxicity show that ambient water toxicity no longer exists in Bay waters. The RWQCB is also developing a Water Quality Attainment Strategy that calls for preventive actions to keep diazinon from entering the Bay.

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

This conclusion is based on the staff findings that:

- 1. An evaluation guideline may not comply with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. None of samples exceeded the draft guideline and ambient water toxicity in the Bay appears to have disappeared. These frequencies do not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

# SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: ES - Estuarine Habitat

Matrix: Water

Water Quality Objective/
Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species. There shall be no acute toxicity in ambient waters. There shall be no chronic toxicity in ambient waters (SFBRWQCB, 1995).

**Evaluation Guideline:** For salt water, USEPA has developed a draft water quality criteria of 400

ng/L (chronic) (USEPA, 2000). The use of these values may not comply

with all the requirements of section 6.1.3 of the Listing Policy.

Data Used to Assess

Water Quality:

The maximum concentration observed in Regional Monitoring Program

samples was 44 ng/L (mean 6.6 ng/L) (Ogle, 2004).

**Spatial Representation:** One station.

**Temporal Representation:** Samples were collected between 1993 and 2001.

**Data Quality Assessment:** SFEI Regional Monitoring Program QAPP (Lowe, S.R., et al., 1998)

(Ogle, 2004).

Line of Evidence Narrative Description Data

Beneficial Use ES - Estuarine Habitat

Information Used to Assess Water Quality:

In response to the RMP observations of ambient water toxicity, and given the linkage established between similar toxicity and pesticides in upstream ambient water, the SFBRWQCB identified all San Francisco

Bay segments as being impaired due to Pesticides in 1998:
Pesticides have been added as a cause of impairment to all Bay segments. The pesticide diazinon has been measured at levels that cause water column toxicity. The pesticide chlorpyrifos may also be a problem. This listing is consistent with listing of the Delta for these pesticides by the Central Valley Regional Water Quality Control Board. This listing was subsequently made specific for the OP pesticide diazinon

by the USEPA.

Line of Evidence Toxicity

Beneficial Use ES - Estuarine Habitat

Information Used to Assess Water Quality:

Ambient water toxicity in San Francisco Bay appears to have disappeared. The results of ambient water toxicity monitoring at Mallard Island indicate a significant reduction in the frequency, duration, and magnitude of toxicity: 4-5% of the ambient water samples were toxic in 1998-99 (34 total samples) and 1999-2000 (23 samples), relative to 14% toxicity frequency observed in 1997-98 (27 samples); none of the 28 samples collected during the 2000-2001 season were significantly toxic.

In addition, the 1998-2000 and 2000-2001 monitoring at Mallard Island did not document any sets of consecutively toxic samples indicative of an extended period of ambient water toxicity, such as were observed in February and May of 1998. Moreover, the magnitude of toxicity (as reflected by the degree [or percentage] of test organism mortality) is also markedly reduced in the later years, again suggesting a reduction in the degree of ambient water toxicity. Subsequent RMP monitoring of ambient water toxicity in water samples collected from October 2001 through April 2003, also indicated an absence of toxicity to the test organisms.

# **Non-Numeric Objective:**

Basin Plan: There shall be no acute toxicity in ambient waters 'There shall be no chronic toxicity in ambient waters'.

Water Segment: Central Basin, San Francisco (part of SF Bay, Central)

Pollutant: Diazinon

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for listing under sections 2.1 and 3.1 of the

Listing Policy. Under section 3.1 a single line of evidence is necessary to

assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. The basis for listing in 1998 was ambient water toxicity and detections of diazinon in Bay waters. In the current assessment, the evaluation guideline available may not satisfy the requirements of the Listing Policy but even if the guideline were used all measurements are much lower than the recommended concentration. Recent measures of toxicity show that ambient water toxicity no longer exists in Bay waters. The RWQCB is also developing a Water Quality Attainment Strategy that calls for preventive actions to keep diazinon from entering the Bay.

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

This conclusion is based on the staff findings that:

- 1. The evaluation guideline may not comply with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. None of samples exceeded the draft guideline and ambient water toxicity in the Bay appears to have disappeared. These frequencies do not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

# SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: ES - Estuarine Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species. There shall be no acute toxicity in ambient waters.

There shall be no chronic toxicity in ambient waters.

**Evaluation Guideline:** For salt water, USEPA has developed draft water quality criteria of 820

ng/L (acute) and 400 ng/L (chronic). The use of these values may not comply with all the requirements of section 6.1.3 of the Listing Policy.

Data Used to Assess Water Quality:

1st sample site: None of the 17 samples exceeded, pollutant range: 240-

32,000 pg/L, average: 3,555.0.

2nd sample site: None of the 16 samples exceeded, pollutant range: 370-

13,000 pg/L, average: 2,898.0 (SFEI, 2001).

**Spatial Representation:** Two sample sites.

Temporal Representation: 1st sample site: Date Range: 02/07/94-08/02/01.

2nd sample site: Date Range: 03/03/93-08/03/01

Data Quality Assessment: SFEI RMP QA/QC program.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: ES - Estuarine Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to.

decreased growth rate and decreased reproductive success of resident or indicator species. There shall be no acute toxicity in ambient waters.

There shall be no chronic toxicity in ambient waters.

**Evaluation Guideline:** For salt water, USEPA has developed draft water quality criteria of 820

ng/L (acute) and 400 ng/L (chronic). The use of these values may not comply with all the requirements of section 6.1.3 of the Listing Policy.

Data Used to Assess Water Quality:

1st sample site: None of the 18 samples exceeded, pollutant range: 240-

32,000 pg/L, average: 3,492.8.

2nd sample site: None of the 16 viable samples exceeded, pollutant

range: 370-13,000 pg/L, average: 2,907.5 (SFEI, 2001).

**Spatial Representation:** Two sample sites.

Temporal Representation: 1st sample site: Date Range: 02/07/94-08/02/01.

2nd sample site: Date Range: 03/03/93-08/03/01.

Data Quality Assessment: SFEI RMP QA/QC program.

Line of Evidence Narrative Description Data

Beneficial Use ES - Estuarine Habitat

**Assess Water Quality:**Diazinon is one of the pollutants listed for this segment on the 2002 section 303(d) list. The data and information used to assess this pollutant-water segment is subsumed in diazinon listing for San Francisco Bay, Central. The conclusions drawn for San Francisco Bay,

Central should be applied to this segment.

Line of Evidence Toxicity

Beneficial Use ES - Estuarine Habitat

**Non-Numeric Objective:** Basin Plan: There shall be no acute toxicity in ambient waters. There

shall be no chronic toxicity in ambient waters.

Data Used to Assess Water Quality:

Ambient water toxicity in San Francisco Bay appears to have disappeared. The results of ambient water toxicity monitoring at Mallard Island indicate a significant reduction in the frequency, duration, and magnitude of toxicity: 4-5% of the ambient water samples were toxic in 1998-99 (34 total samples) and 1999-2000 (23 samples), relative to 14% toxicity frequency observed in 1997-98 (27 samples); none of the 28 samples collected during the 2000-2001 season were significantly toxic.

In addition, the 1998-2000 and 2000-2001 monitoring at Mallard Island did not document any sets of consecutively toxic samples indicative of an extended period of ambient water toxicity, such as were observed in February and May of 1998. The magnitude of toxicity (as reflected by the degree [or percentage] of test organism mortality) is also markedly reduced in the later years, indicating a reduction in the degree of ambient water toxicity. Subsequent RMP monitoring of ambient water toxicity in water samples collected from 10/2001 through 4/2003 also indicated an absence of toxicity to the test organisms (Ogle, 2004).

Line of Evidence Narrative Description Data

Beneficial Use ES - Estuarine Habitat

Information Used to
Assess Water Quality:

In response to the RMP observations of ambient water toxicity, and given the linkage established between similar toxicity and pesticides in upstream ambient water, the SFBRWQCB identified all San Francisco

Bay segments as being impaired due to Pesticides in 1998:

Pesticides have been added as a cause of impairment to all Bay segments. The pesticide diazinon has been measured at levels that cause water column toxicity. The pesticide chlorpyrifos may also be a problem. This listing is consistent with listing of the Delta for these pesticides by the Central Valley Regional Water Quality Control Board. This listing was subsequently made specific for the organophosphate pesticide diazinon by the USEPA.

# **Non-Numeric Objective:**

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species. There shall be no acute toxicity in ambient waters. There shall be no chronic toxicity in ambient waters.

Water Segment: Islais Creek

Pollutant: Endosulfan sulfate

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.6 of the Listing Policy. Under section 4.6 two lines of evidence

are necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. A sediment guideline is not available and it cannot be determined if the pollutant is likely to cause or contribute to the toxic effect or tot he benthic effects.

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

This conclusion is based on the staff findings that:

1. A sediment quality guideline that complies with the requirements of section 6.1.3 of the Policy is not available.

- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

No applicable sediment guideline is available. **Evaluation Guideline:** 

**Data Used to Assess** 

Water Quality:

Three measurements. Concentration ranges from 3.96 ng/g to 21 ng/g

(Hunt et al., 1998b).

Data was collected over the length of the Creek concurrently with benthic **Spatial Representation:** 

community and toxicity samples.

Temporal Representation: Data was collected in 1997.

Data Quality Assessment: BPTCP Quality Assurance Project Plan.

Numeric Line of Evidence **Toxicity** 

**Beneficial Use:** ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ **Water Quality Criterion:** 

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms (SFBRWQCB, 1995).

**Evaluation Guideline:** BPTCP Reference envelope approach used.

**Data Used to Assess** 

Water Quality:

Significant amphipod toxicity in 3 of 4 samples (75%). Significant urchin

toxicity in 4 of 5 samples (80%) (Hunt et al., 1998b).

Data was synoptically collected with benthic community and toxicity **Spatial Representation:** 

measurements over the length of the creek.

Temporal Representation: Data was collected from 9/94 - 9/97.

Data Quality Assessment: BPTCP Quality Assurance Project Plan (Stephenson et al., 1994).

Numeric Line of Evidence Toxicity

ES - Estuarine Habitat, MA - Marine Habitat **Beneficial Use:** 

Sediment Matrix:

Water Quality Objective/ **Water Quality Criterion:** 

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms (SFBRWQCB, 1995).

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community

composition, or any other relevant measure of the health of an organism,

population, or community.

BPTCP Reference envelope approach used. **Evaluation Guideline:** 

**Data Used to Assess** 

Water Quality:

Significant amphipod toxicity in 7 of 18 samples (Battelle Memorial

Institute, 2002).

Data was synoptically collected with benthic community and toxicity **Spatial Representation:** 

measurements over the length of the creek.

**Temporal Representation:** Data were collected between 1998 and 2000.

Environmental Conditions:

Samples were collected in both wet and dry seasons.

Data Quality Assessment: Methods used were equivalent to those used in the BPTCP QAPP (Stephenson, et al., 1994). All reported data met QA requirements.

Numeric Line of Evidence

Population/Community Degradation

**Beneficial Use:** 

ES - Estuarine Habitat, MA - Marine Habitat

Matrix:

Sediment

Water Quality Objective/ **Water Quality Criterion:** 

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism,

population, or community.

**Evaluation Guideline:** 

Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the

benthic community.

**Data Used to Assess** 

Water Quality:

Relative benthic index = 0.22, 0.25, 0.43 (3 benthic gradient samples)

(Hunt et al., 1998b).

**Spatial Representation:** 

Data was synoptically collected with benthic community and toxicity

measurements over the length of the creek.

Temporal Representation: Data was collected from 9/94 - 9/97.

Data Quality Assessment: BPTCP Quality Assurance Project Plan.

Line of Evidence

Remedial Program in Place

**Beneficial Use** 

ES - Estuarine Habitat

Information Used to **Assess Water Quality:**  The BPTCP Consolidated Toxic Hot Spots Cleanup Plan presents a variety of corrective actions that need to be completed in order for the cove to be remediated. Responsible parties have been identified.

Water Segment: Islais Creek

**Pollutant:** Polychlorinated biphenyls

**Decision:** Delist

Weight of Evidence:

This pollutant is being considered for removal from the 303(d) list under sections 4.6, and 4.10 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess delisting status while under section 4.10, a minimum of two lines of evidence are needed to assess delisting status.

Six lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6 the site has significant sediment toxicity but there is insufficient information to determine whether the pollutant contributes to the toxic effects. The benthic community may be impacted by this pollutant. A remedial program has scheduled actions to address this pollutant water body combination.

Based on the readily available data and information for sediments, the weight of evidence indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category. This pollutant should not be removed from this segment because PCBs have been found to bioaccumulate in fish tissue.

This conclusion is based on the staff findings that:

- 1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. Two of 49 samples exceeded the sediment guideline and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy. Ten of 22 samples exhibited significant amphipod toxicity, 4 of five samples exhibited significant sea urchin toxicity and the benthic community is considered to be degraded.
- 5. Pursuant to section 3.11 of the Listing Policy, PCBs have been listed throughout the Bay because of concerns with bioaccumulation in fish tissue.

# SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because the PCB sediment quality is not exceeded and although there is significant sediment toxicity it cannot be determined if the pollutant contributes to or causes the documented toxicity effects.

#### Lines of Evidence:

Numeric Line of EvidencePollutant-SedimentBeneficial Use:ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms (SFBRWQCB, 1995).

**Evaluation Guideline:** Sediment guideline of 400 ng/g used (MacDonald et al., 2000).

Data Used to Assess

Water Quality:

One of 3 samples exceeded sediment guideline (Hunt et al., 1998b).

**Spatial Representation:** Data was synoptically collected with benthic community and toxicity

measurements over the length of the creek.

Temporal Representation: Data was collected from 9/94 - 9/97.

Data Quality Assessment: BPTCP Quality Assurance Project Plan (Stephenson et al., 1994).

Numeric Line of EvidencePollutant-SedimentBeneficial Use:ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms (SRBRWQCB, 1995).

**Evaluation Guideline:** Sediment guideline of 400 ng/g used (MacDonald et al., 2000).

Data Used to Assess

Water Quality:

One of 46 samples exceeded the sediment quality guideline (Battelle

Memorial Institute, 2002).

**Spatial Representation:** Data was synoptically collected with benthic community and toxicity

measurements over the length of the creek.

Temporal Representation: Data were collected between 1998 and 2000.

Data Quality Assessment: Methods used were equivalent to those used in the BPTCP QAPP

(Stephenson et al., 1994). All reported data met QA requirements.

Numeric Line of Evidence Toxicity

**Beneficial Use:** ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/
Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms (SFBRWQCB, 1995).

**Evaluation Guideline:** BPTCP Reference envelope approach used.

**Data Used to Assess** 

Water Quality:

Significant amphipod toxicity in 3 of 4 samples (75%). Significant urchin

toxicity in 4 of 5 samples (80%) (Hunt et al., 1998b).

**Spatial Representation:** Data was synoptically collected with benthic community and toxicity

measurements over the length of the creek.

Temporal Representation: Data was collected from 9/94 - 9/97.

Data Quality Assessment: BPTCP Quality Assurance Project Plan (Stephenson et al., 1994).

Numeric Line of Evidence Toxicity

**Beneficial Use:** ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms (SFBRWQCB, 1995).

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community

composition, or any other relevant measure of the health of an organism,

population, or community.

**Evaluation Guideline:** BPTCP Reference envelope approach used.

**Data Used to Assess** 

Water Quality:

Significant amphipod toxicity in 7 of 18 samples (Battelle Memorial

Institute, 2002).

Spatial Representation: Data was synoptically collected with benthic community and toxicity

measurements over the length of the creek.

**Temporal Representation:** Data were collected between 1998 and 2000.

Environmental Conditions:

Samples were collected in both wet and dry seasons.

Data Quality Assessment: Methods used were equivalent to those used in the BPTCP QAPP

(Stephenson, et al., 1994). All reported data met QA requirements.

Numeric Line of Evidence Population/Community Degradation

**Beneficial Use:** ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism,

population, or community.

**Evaluation Guideline:** Evaluation of the benthic data were completed using the approaches

developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the

benthic community.

**Data Used to Assess** 

Water Quality:

Relative benthic index = 0.22, 0.25, 0.43 (3 benthic gradient samples)

(Hunt et al., 1998b).

Spatial Representation: Data was synoptically collected with benthic community and toxicity

measurements over the length of the creek.

**Temporal Representation:** Data was collected from 9/94 - 9/97.

**Data Quality Assessment:** BPTCP Quality Assurance Project Plan.

Line of Evidence Remedial Program in Place

Beneficial Use ES - Estuarine Habitat

Information Used to Assess Water Quality:

The BPTCP Consolidated Toxic Hot Spots Cleanup Plan presents a variety of corrective actions that need to be completed in order for the cove to be remediated. Responsible parties have been identified.

Water Segment: Mission Creek

Pollutant: Chlorpyrifos

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.6 of the Listing Policy. Under section 4.6 two lines of evidence

are necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. A sediment guideline is not available and it cannot be determined if the pollutant is likely to cause or contribute to the toxic effect.

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

This conclusion is based on the staff findings that:

1. A sediment quality guideline that complies with the requirements of section 6.1.3 of the Policy is not available.

2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because it cannot be determined if applicable water quality

standards are attained.

#### Lines of Evidence:

Numeric Line of EvidencePollutant-SedimentBeneficial Use:ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

**Evaluation Guideline:** No applicable sediment guideline is available.

**Data Used to Assess** 

Water Quality:

Three measurements (Hunt et al., 1998b).

Spatial Representation: Data were collected concurrently with benthic community and toxicity

measurements.

Temporal Representation: Data was collected, from 5/95-4/97.

Data Quality Assessment: BPTCP Quality Assurance Project Plan.

Numeric Line of Evidence Toxicity

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community

composition, or any other relevant measure of the health of an organism,

population, or community.

**Evaluation Guideline:** BPTCP reference envelope approach used.

Data Used to Assess Water Quality:

BPTCP Data: Significant amphipod toxicity, 3 of 5 tests (60%) significant urchin toxicity (Hunt et al., 1998b). SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Six transects were monitored over three years and at corresponding North and South sampling stations for each transect (i.e. 1N, 1S). Excluding stations 5 and 6 (No data for 1999 and 2000), the data shows 4 of 20 sampling stations (1N/S-4N/S) indicate sediment toxicity and amphipod survival below the BPTCP reference tolerance limit

(Battelle Memorial Institute, 2002).

Spatial Representation: Data were collected concurrently with benthic and chemical

measurements.

**Temporal Representation:** Data was collected from 5/95-4/97.

Data Quality Assessment: BPTCP Quality Assurance Project Plan. SWRCB received "Sediment

Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Appropriate QA procedures were followed.

Numeric Line of Evidence Toxicity

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a

detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism.

population, or community (BPTCP, 1998).

**Evaluation Guideline:** BPTCP reference envelope approach used.

Data Used to Assess Water Quality:

Significant amphipod toxicity was observed in 4 of 21 samples. Observed toxicity was recorded in the year 2000 only (Battelle Memorial Institute,

2002).

**Spatial Representation:** Data was synoptically collected with benthic community and toxicity

measurements over the length of the creek.

**Temporal Representation:** Data were collected between 1998 and 2000.

**Numeric Line of Evidence** Population/Community Degradation

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism,

population, or community.

**Evaluation Guideline:** Evaluation of the benthic data were completed using the approaches

developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the

benthic community (BPTCP, 1998).

Data Used to Assess Water Quality:

Relative benthic index = 0.00, 0.34, and 0.65 (3 benthic gradient

samples) (Hunt et al, 1998b).

**Spatial Representation:** Data were collected concurrently with toxicity and chemical samples.

**Temporal Representation:** Data was collected, from 5/95-4/97.

Data Quality Assessment: BPTCP Quality Assurance Project Plan.

Water Segment: Mission Creek

Pollutant: Chromium (total)

**Decision:** Delist

Weight of Evidence:

This pollutant is being considered for delisting under sections 4.6 and 4.9 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess listing status while under section 4.9, a minimum of two lines of evidence are needed to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant sediment toxicity but the pollutant is not likely to cause or contribute to any toxic effect. The benthic community is impacted but is not associated with this pollutant.

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

This conclusion is based on the staff findings that:

- 1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. One of 47 samples exceeded the 370  $\mu$ g/g ERM sediment quality guideline and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism,

population, or community.

**Evaluation Guideline:** ERM of 370 µg/g was used (Long et al., 1995).

**Data Used to Assess** 

Water Quality:

One of 3 samples exceeded the sediment guideline (Hunt et al., 1998b).

**Spatial Representation:** Data were collected concurrently with benthic community and toxicity

measurements.

Temporal Representation: Data was collected in 1997.

Data Quality Assessment: BPTCP Quality Assurance Project Plan.

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: ES - Estuarine Habitat

Sediment Matrix:

Water Quality Objective/ **Water Quality Criterion:** 

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism,

population, or community.

None of 44 samples exceeded the ERM (Battelle Memorial Institute,

ERM of 370 µg/g was used (Long et al., 1995). **Evaluation Guideline:** 

**Data Used to Assess** 

Water Quality:

2002).

Data was synoptically collected with benthic community and toxicity **Spatial Representation:** 

measurements over the length of the creek.

Temporal Representation: Data were collected between 1998 and 2000.

Data Quality Assessment: Methods used were equivalent to those used in the BPTCP QAPP. All

reported data met QA requirements.

Numeric Line of Evidence **Toxicity** 

ES - Estuarine Habitat **Beneficial Use:** 

Matrix: Sediment

Water Quality Objective/ **Water Quality Criterion:** 

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community

composition, or any other relevant measure of the health of an organism,

population, or community.

**Evaluation Guideline:** BPTCP reference envelope approach used.

Data Used to Assess Water Quality:

BPTCP Data: Significant amphipod toxicity, 3 of 5 tests (60%) significant urchin toxicity (Hunt et al., 1998b). SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Six transects were monitored over three years and at corresponding North and South sampling stations for each transect (i.e. 1N, 1S). Excluding stations 5 and 6 (No data for 1999 and 2000), the data shows 4 of 20 sampling stations (1N/S-4N/S) indicate sediment toxicity and amphipod survival below the BPTCP reference tolerance limit

(Battelle Memorial Institute, 2002).

**Spatial Representation:** Data were collected concurrently with benthic and chemical

measurements.

Temporal Representation: Data was collected from 5/95-4/97.

Data Quality Assessment: BPTCP Quality Assurance Project Plan. SWRCB received "Sediment

Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Appropriate QA procedures were followed.

Numeric Line of Evidence Toxicity

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism,

population, or community (BPTCP, 1998).

**Evaluation Guideline:** BPTCP reference envelope approach used.

Data Used to Assess Water Quality:

Significant amphipod toxicity was observed in 4 of 21 samples. Observed toxicity was recorded in the year 2000 only (Battelle Memorial Institute,

2002).

**Spatial Representation:** Data was synoptically collected with benthic community and toxicity

measurements over the length of the creek.

**Temporal Representation:** Data were collected between 1998 and 2000.

**Numeric Line of Evidence** Population/Community Degradation

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism

composition, or any other relevant measure of the health of an organism,  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left$ 

population, or community.

**Evaluation Guideline:** Evaluation of the benthic data were completed using the approaches

developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the

benthic community (BPTCP, 1998).

**Data Used to Assess** 

Water Quality:

Relative benthic index = 0.00, 0.34, and 0.65 (3 benthic gradient

samples) (Hunt et al, 1998b).

**Spatial Representation:** Data were collected concurrently with toxicity and chemical samples.

**Temporal Representation:** Data was collected, from 5/95-4/97.

Data Quality Assessment: BPTCP Quality Assurance Project Plan.

Line of Evidence Remedial Program in Place

Beneficial Use ES - Estuarine Habitat

Information Used to Assess Water Quality:

The BPTCP Consolidated Toxic Hot Spots Cleanup Plan presents a variety of corrective actions that need to be completed in order for the cove to be remediated. Responsible parties have been identified.

Water Segment: Mission Creek

Pollutant: Copper

Decision: Delist

Weight of Evidence:

This pollutant is being considered for delisting under sections 4.6 and 4.9 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess listing status while under section 4.9, a minimum of two lines of evidence are needed to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant sediment toxicity but the pollutant is not likely to cause or contribute to any toxic effect. The benthic community is impacted but is not associated with this pollutant.

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

This conclusion is based on the staff findings that:

- 1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. One of 47 samples exceeded the 270  $\mu$ g/g ERM sediment quality guideline and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of EvidencePollutant-SedimentBeneficial Use:ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism,

population, or community.

**Evaluation Guideline:** ERM of 270 μg/g was used (Long et al., 1995).

Data Used to Assess Water Quality:

One of 3 samples exceeded the sediment guideline (Hunt et al., 1998b).

Spatial Representation: Data were collected concurrently with benthic community and toxicity

measurements.

Temporal Representation: Data was collected in 1997.

Data Quality Assessment: BPTCP Quality Assurance Project Plan.

**Numeric Line of Evidence** Pollutant-Sediment

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism.

population, or community.

**Evaluation Guideline:** ERM of 270 μg/g was used (Long et al., 1995).

Data Used to Assess

Water Quality:

None of 44 samples exceeded the ERM (Hunt et al., 1998b).

**Spatial Representation:** Data was synoptically collected with benthic community and toxicity

measurements over the length of the creek.

Temporal Representation: Data were collected between 1998 and 2000.

Data Quality Assessment: Methods used were equivalent to those used in the BPTCP QAPP. All

reported data met QA requirements.

Numeric Line of Evidence Toxicity

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community

composition, or any other relevant measure of the health of an organism,

population, or community.

**Evaluation Guideline:** BPTCP reference envelope approach used.

**Data Used to Assess** Water Quality:

BPTCP Data: Significant amphipod toxicity, 3 of 5 tests (60%) significant urchin toxicity (Hunt et al., 1998b). SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Six transects were monitored over three years and at corresponding North and South sampling stations for each transect (i.e. 1N, 1S). Excluding stations 5 and 6 (No data for 1999 and 2000), the data shows 4 of 20 sampling stations (1N/S-4N/S) indicate sediment toxicity and amphipod survival below the BPTCP reference tolerance limit

(Battelle Memorial Institute, 2002).

**Spatial Representation:** Data were collected concurrently with benthic and chemical

measurements.

Temporal Representation: Data was collected from 5/95-4/97.

Data Quality Assessment: BPTCP Quality Assurance Project Plan. SWRCB received "Sediment

Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Appropriate QA procedures were followed.

Numeric Line of Evidence **Toxicity** 

ES - Estuarine Habitat Beneficial Use:

Sediment Matrix:

Water Quality Objective/ **Water Quality Criterion:** 

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism.

population, or community (BPTCP, 1998).

BPTCP reference envelope approach used. **Evaluation Guideline:** 

**Data Used to Assess** 

Water Quality:

Significant amphipod toxicity was observed in 4 of 21 samples. Observed toxicity was recorded in the year 2000 only (Battelle Memorial Institute,

2002).

Data was synoptically collected with benthic community and toxicity **Spatial Representation:** 

measurements over the length of the creek.

Temporal Representation: Data were collected between 1998 and 2000.

Numeric Line of Evidence Population/Community Degradation

Beneficial Use: ES - Estuarine Habitat

Sediment Matrix:

Water Quality Objective/ **Water Quality Criterion:** 

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism.

composition, or any other relevant measure of the health of an organism,  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left$ 

population, or community.

**Evaluation Guideline:** Evaluation of the benthic data were completed using the approaches

developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the

benthic community (BPTCP, 1998).

**Data Used to Assess** 

Water Quality:

Relative benthic index = 0.00, 0.34, and 0.65 (3 benthic gradient

samples) (Hunt et al, 1998b).

**Spatial Representation:** Data were collected concurrently with toxicity and chemical samples.

**Temporal Representation:** Data was collected, from 5/95-4/97.

Data Quality Assessment: BPTCP Quality Assurance Project Plan.

Line of Evidence Remedial Program in Place

Beneficial Use ES - Estuarine Habitat

Information Used to Assess Water Quality:

The BPTCP Consolidated Toxic Hot Spots Cleanup Plan presents a variety of corrective actions that need to be completed in order for the cove to be remediated. Responsible parties have been identified.

Water Segment: Mission Creek

Pollutant: Mirex

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.6 of the Listing Policy. Under section 4.6 two lines of evidence

are necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. A sediment guideline is not available and it cannot be determined if the pollutant is likely to cause or contribute to the toxic effect.

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

This conclusion is based on the staff findings that:

1. A sediment quality guideline that complies with the requirements of section 6.1.3 of the Policy is not available.

- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. Even though the sediments are toxic and benthos is impacted, this pollutant cannot be associated with the effects.
- 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism,

population, or community (BPTCP, 1998).

**Evaluation Guideline:** No applicable guideline is available.

**Data Used to Assess** 

Water Quality:

Three measurements (Hunt et al., 1998b).

Spatial Representation: Data were collected concurrently with benthic and toxicity

measurements.

**Temporal Representation:** Data was collected, from 5/95-4/97.

Data Quality Assessment: BPTCP Quality Assurance Project Plan.

Numeric Line of Evidence Toxicity

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism,

population, or community.

**Evaluation Guideline:** BPTCP reference envelope approach used.

Data Used to Assess Water Quality:

BPTCP Data: Significant amphipod toxicity, 3 of 5 tests (60%) significant urchin toxicity (Hunt et al., 1998b). SWRCB received "Sediment

Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Six transects were monitored over three years and at corresponding North and South sampling stations for each transect (i.e. 1N, 1S). Excluding stations 5 and 6 (No data for 1999 and 2000), the data shows 4 of 20 sampling stations (1N/S-4N/S) indicate sediment toxicity and amphipod survival below the BPTCP reference tolerance limit

(Battelle Memorial Institute, 2002).

**Spatial Representation:** Data were collected concurrently with benthic and chemical

measurements.

**Temporal Representation:** Data was collected from 5/95-4/97.

Data Quality Assessment: BPTCP Quality Assurance Project Plan. SWRCB received "Sediment

Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Appropriate QA procedures were followed.

**Numeric Line of Evidence** Toxicity

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/
Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism,

population, or community (BPTCP, 1998).

**Evaluation Guideline:** BPTCP reference envelope approach used.

Data Used to Assess Water Quality:

Significant amphipod toxicity was observed in 4 of 21 samples. Observed toxicity was recorded in the year 2000 only (Battelle Memorial Institute,

2002).

Spatial Representation: Data was synoptically collected with benthic community and toxicity

measurements over the length of the creek.

**Temporal Representation:** Data were collected between 1998 and 2000.

**Numeric Line of Evidence** Population/Community Degradation

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism,

population, or community.

**Evaluation Guideline:** Evaluation of the benthic data were completed using the approaches

developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the

benthic community (BPTCP, 1998).

Data Used to Assess Water Quality:

Relative benthic index = 0.00, 0.34, and 0.65 (3 benthic gradient

samples) (Hunt et al, 1998b).

**Spatial Representation:** Data were collected concurrently with toxicity and chemical samples.

Temporal Representation: Data was collected, from 5/95-4/97.

**Data Quality Assessment:** BPTCP Quality Assurance Project Plan.

Water Segment: Oakland Inner Harbor (Fruitvale Site, part of SF Bay, Central)

Pollutant: Diazinon

**Decision:** Delist

Weight of Evidence:

This pollutant is being considered for delisting under sections 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. The basis for listing in 1998 was ambient water toxicity and detections of diazinon in Bay waters. In the current assessment, the evaluation guideline available may not satisfy the requirements of the Listing Policy but even if the guideline were used all measurements are much lower than the recommended concentration. Recent measures of toxicity show that ambient water toxicity no longer exists in Bay waters. The RWQCB is also developing a Water Quality Attainment Strategy that calls for preventive actions to keep diazinon from entering the Bay.

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

This conclusion is based on the staff findings that:

- 1. The evaluation guideline may not comply with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. None of samples exceeded the draft guideline and ambient water toxicity in the Bay appears to have disappeared. These frequencies do not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

## SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: ES - Estuarine Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species. There shall be no acute toxicity in ambient waters.

There shall be no chronic toxicity in ambient waters.

**Evaluation Guideline:** For salt water, USEPA has developed draft water quality criteria of 820

ng/L (acute) and 400 ng/L (chronic). The use of these values may not comply with all the requirements of section 6.1.3 of the Listing Policy.

Data Used to Assess Water Quality:

1st sample site: None of the 17 samples exceeded, pollutant range: 240-

32,000 pg/L, average: 3,555.0.

2nd sample site: None of the 16 samples exceeded, pollutant range: 370-

13,000 pg/L, average: 2,898.0 (SFEI, 2001).

**Spatial Representation:** Two sample sites.

Temporal Representation: 1st sample site: Date Range: 02/07/94-08/02/01.

2nd sample site: Date Range: 03/03/93-08/03/01

Data Quality Assessment: SFEI RMP QA/QC program.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: ES - Estuarine Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident

or indicator species. There shall be no acute toxicity in ambient waters.

There shall be no chronic toxicity in ambient waters.

**Evaluation Guideline:** For salt water, USEPA has developed draft water quality criteria of 820

ng/L (acute) and 400 ng/L (chronic). The use of these values may not comply with all the requirements of section 6.1.3 of the Listing Policy.

Data Used to Assess Water Quality:

1st sample site: None of the 18 samples exceeded, pollutant range: 240-

32,000 pg/L, average: 3,492.8.

2nd sample site: None of the 16 viable samples exceeded, pollutant

range: 370-13,000 pg/L, average: 2,907.5 (SFEI, 2001).

**Spatial Representation:** Two sample sites.

Temporal Representation: 1st sample site: Date Range: 02/07/94-08/02/01.

2nd sample site: Date Range: 03/03/93-08/03/01.

Data Quality Assessment: SFEI RMP QA/QC program.

Line of Evidence Narrative Description Data

**Beneficial Use** ES - Estuarine Habitat

**Assess Water Quality:**Diazinon is one of the pollutants listed for this segment on the 2002 section 303(d) list. The data and information used to assess this pollutant-water segment is subsumed in diazinon listing for San Francisco Bay, Central. The conclusions drawn for San Francisco Bay,

Central should be applied to this segment.

Line of Evidence Toxicity

Beneficial Use ES - Estuarine Habitat

**Non-Numeric Objective:** Basin Plan: There shall be no acute toxicity in ambient waters. There

shall be no chronic toxicity in ambient waters.

Data Used to Assess
Water Quality:

Ambient water toxicity in San Francisco Bay appears to have disappeared. The results of ambient water toxicity monitoring

disappeared. The results of ambient water toxicity monitoring at Mallard Island indicate a significant reduction in the frequency, duration, and magnitude of toxicity: 4-5% of the ambient water samples were toxic in 1998-99 (34 total samples) and 1999-2000 (23 samples), relative to 14% toxicity frequency observed in 1997-98 (27 samples); none of the 28 samples collected during the 2000-2001 season were significantly toxic.

In addition, the 1998-2000 and 2000-2001 monitoring at Mallard Island did not document any sets of consecutively toxic samples indicative of an extended period of ambient water toxicity, such as were observed in February and May of 1998. The magnitude of toxicity (as reflected by the degree [or percentage] of test organism mortality) is also markedly reduced in the later years, indicating a reduction in the degree of ambient water toxicity. Subsequent RMP monitoring of ambient water toxicity in water samples collected from 10/2001 through 4/2003 also indicated an absence of toxicity to the test organisms (Ogle, 2004).

Line of Evidence Narrative Description Data

Beneficial Use ES - Estuarine Habitat

In response to the RMP observations of ambient water toxicity, and given the linkage established between similar toxicity and pesticides in upstream ambient water, the SFBRWQCB identified all San Francisco Bay segments as being impaired due to Pesticides in 1998:

Pesticides have been added as a cause of impairment to all Bay segments. The pesticide diazinon has been measured at levels that cause water column toxicity. The pesticide chlorpyrifos may also be a problem. This listing is consistent with listing of the Delta for these pesticides by the Central Valley Regional Water Quality Control Board. This listing was subsequently made specific for the organophosphate pesticide diazinon by the USEPA.

## **Non-Numeric Objective:**

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species. There shall be no acute toxicity in ambient waters. There shall be no chronic toxicity in ambient waters.

Water Segment: Oakland Inner Harbor (Pacific Dry-dock Yard 1 Site, part of SF Bay, Central)

Pollutant: Chlorpyrifos

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.6 of the Listing Policy. Under section 4.6 two lines of evidence

are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. A sediment guideline is not available and it cannot be determined if the pollutant is likely to cause or contribute to the toxic effect.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. A sediment quality guideline that complies with the requirements of section 6.1.3 of the Policy is not available.

2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because it cannot be determined if applicable water quality

standards are not attained.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

**Evaluation Guideline:** No applicable sediment quality guideline is available.

**Data Used to Assess** 

Water Quality:

Two measurements (Hunt et al., 1998b).

**Spatial Representation:** Spatial distribution of samples is described in the report

Temporal Representation: Data collected during 1995.

Data Quality Assessment: Used BPTCP QA/QC.

Numeric Line of Evidence Toxicity

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community

composition, or any other relevant measure of the health of an organism,

population, or community.

**Evaluation Guideline:** BPTCP reference envelope approach used.

**Data Used to Assess** 

Water Quality:

Significant amphipod toxicity in 2 of 4 tests. No significant urchin toxicity

(4 tests) (Hunt et al., 1998b).

**Spatial Representation:** Spatial distribution of samples is described in the report

**Temporal Representation:** Data collected during 4/95- 4/97.

Data Quality Assessment: Used BPTCP QA/QC.

Water Segment: Oakland Inner Harbor (Pacific Dry-dock Yard 1 Site, part of SF Bay, Central)

Pollutant: Diazinon

**Decision:** Delist

Weight of Evidence: Thi

This pollutant is being considered for delisting under sections 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. The basis for listing in 1998 was ambient water toxicity and detections of diazinon in Bay waters. In the current assessment, the evaluation guideline available may not satisfy the requirements of the Listing Policy. Even if the guideline were used, all measurements are much lower than the recommended concentration. Recent measures of toxicity show that ambient water toxicity no longer exists in Bay waters. The RWQCB is also developing a Water Quality Attainment Strategy that calls for preventive actions to keep diazinon from entering the Bay.

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

This conclusion is based on the staff findings that:

- 1. An evaluation guideline may not comply with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. None of samples exceeded the draft guideline and ambient water toxicity in the Bay appears to have disappeared. These frequencies do not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

## SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: ES - Estuarine Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species. There shall be no acute toxicity in ambient waters.

There shall be no chronic toxicity in ambient waters.

**Evaluation Guideline:** For salt water, USEPA has developed draft water quality criteria of 820

ng/L (acute) and 400 ng/L (chronic). The use of these values may not comply with all the requirements of section 6.1.3 of the Listing Policy.

Data Used to Assess Water Quality:

1st sample site: None of the 17 samples exceeded, pollutant range: 240-

32,000 pg/L, average: 3,555.0.

2nd sample site: None of the 16 samples exceeded, pollutant range: 370-

13,000 pg/L, average: 2,898.0 (SFEI, 2001).

**Spatial Representation:** Two sample sites.

Temporal Representation: 1st sample site: Date Range: 02/07/94-08/02/01.

2nd sample site: Date Range: 03/03/93-08/03/01

Data Quality Assessment: SFEI RMP QA/QC program.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: ES - Estuarine Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to,

decreased growth rate and decreased reproductive success of resident or indicator species. There shall be no acute toxicity in ambient waters.

There shall be no chronic toxicity in ambient waters.

**Evaluation Guideline:** For salt water, USEPA has developed draft water quality criteria of 820

ng/L (acute) and 400 ng/L (chronic). The use of these values may not comply with all the requirements of section 6.1.3 of the Listing Policy.

Data Used to Assess Water Quality:

1st sample site: None of the 18 samples exceeded, pollutant range: 240-

32,000 pg/L, average: 3,492.8.

2nd sample site: None of the 16 viable samples exceeded, pollutant

range: 370-13,000 pg/L, average: 2,907.5 (SFEI, 2001).

**Spatial Representation:** Two sample sites.

Temporal Representation: 1st sample site: Date Range: 02/07/94-08/02/01.

2nd sample site: Date Range: 03/03/93-08/03/01.

Data Quality Assessment: SFEI RMP QA/QC program.

Line of Evidence Narrative Description Data

Beneficial Use ES - Estuarine Habitat

**Assess Water Quality:**Diazinon is one of the pollutants listed for this segment on the 2002 section 303(d) list. The data and information used to assess this pollutant-water segment is subsumed in diazinon listing for San Francisco Bay, Central. The conclusions drawn for San Francisco Bay,

Central should be applied to this segment (SFEI, 2001).

Line of Evidence Toxicity

Beneficial Use ES - Estuarine Habitat

**Non-Numeric Objective:** Basin Plan: There shall be no acute toxicity in ambient waters. There

shall be no chronic toxicity in ambient waters.

Data Used to Assess
Water Quality:

All directions of the control of the control

Ambient water toxicity in San Francisco Bay appears to have disappeared. The results of ambient water toxicity monitoring at Mallard Island indicate a significant reduction in the frequency, duration, and magnitude of toxicity: 4-5% of the ambient water samples were toxic in 1998-99 (34 total samples) and 1999-2000 (23 samples), relative to 14% toxicity frequency observed in 1997-98 (27 samples); none of the 28 samples collected during the 2000-2001 season were significantly toxic.

In addition, the 1998-2000 and 2000-2001 monitoring at Mallard Island did not document any sets of consecutively toxic samples indicative of an extended period of ambient water toxicity, such as were observed in February and May of 1998. The magnitude of toxicity (as reflected by the degree [or percentage] of test organism mortality) is also markedly reduced in the later years, indicating a reduction in the degree of ambient water toxicity. Subsequent RMP monitoring of ambient water toxicity in water samples collected from 10/2001 through 4/2003 also indicated an absence of toxicity to the test organisms (Ogle, 2004).

Line of Evidence Narrative Description Data

Beneficial Use ES - Estuarine Habitat

Information Used to Assess Water Quality:

In response to the RMP observations of ambient water toxicity, and given the linkage established between similar toxicity and pesticides in upstream ambient water, the SFBRWQCB identified all San Francisco Bay segments as being impaired due to Pesticides in 1998:

Pesticides have been added as a cause of impairment to all Bay segments. The pesticide diazinon has been measured at levels that cause water column toxicity. The pesticide chlorpyrifos may also be a problem. This listing is consistent with listing of the Delta for these pesticides by the Central Valley Regional Water Quality Control Board. This listing was subsequently made specific for the organophosphate pesticide diazinon by the USEPA.

## **Non-Numeric Objective:**

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species. There shall be no acute toxicity in ambient waters. There shall be no chronic toxicity in ambient waters.

Water Segment: Oakland Inner Harbor (Pacific Dry-dock Yard 1 Site, part of SF Bay, Central)

Pollutant: Mirex

Decision: Delist

Weight of Evidence: This pollutant is being considered for delisting under sections 4.6 and 4.10 of

the Listing Policy.

Two lines of evidence are available in the administrative record to assess this pollutant. The site has significant sediment toxicity but it cannot be determined if the pollutant is likely to cause or contribute to the toxic effect.

Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. A sediment quality guideline is not available that complies with the requirements of section 6.1.3 of the Policy.

2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

3. The number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

**Evaluation Guideline:** There is no applicable sediment quality guideline available.

**Data Used to Assess** 

Water Quality:

Three measurements (Hunt et al., 1998b).

**Spatial Representation:** Spatial distribution of samples is described in the report: Sediment quality

and biological effects in San Francisco Bay (Bay Protection and Toxic

Cleanup Program), dated August 1998.

Temporal Representation: Data collected during 4/95-4/97.

Data Quality Assessment: Used BPTCP QA/QC.

Numeric Line of Evidence Toxicity

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community

composition, or any other relevant measure of the health of an organism,

population, or community.

**Evaluation Guideline:** BPTCP reference envelope approach used.

**Data Used to Assess** 

Water Quality:

Significant amphipod toxicity in 2 of 4 tests. No significant urchin toxicity

(4 tests) (Hunt et al., 1998b).

**Spatial Representation:** Spatial distribution of samples is described in the report

**Temporal Representation:** Data collected during 4/95- 4/97.

Data Quality Assessment: Used BPTCP QA/QC.

Water Segment: Oakland Inner Harbor (Pacific Dry-dock Yard 1 Site, part of SF Bay, Central)

Pollutant: Tributylin TBT (Tributylstanne)

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.6 of the Listing Policy. Under section 4.6 two lines of evidence

are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. A sediment guideline is not available and it cannot be determined if

the pollutant is likely to cause or contribute to the toxic effect.

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

This conclusion is based on the staff findings that:

1. A sediment quality guideline that complies with the requirements of section 6.1.3 of the Policy is not available.

2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy

3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

4. The sediments are toxic in 2 of 4 tests.

5. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are met.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because it cannot be determined if applicable water quality

standards are not attained.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

**Evaluation Guideline:** No applicable sediment guideline available.

**Data Used to Assess** 

Water Quality:

Two measurements (Hunt et al., 1998b).

**Spatial Representation:** Spatial distribution of samples is described in the report

**Temporal Representation:** Data collected in 1995. **Data Quality Assessment:** Used BPTCP QA/QC.

Numeric Line of Evidence Toxicity

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community

composition, or any other relevant measure of the health of an organism,

population, or community.

**Evaluation Guideline:** BPTCP reference envelope approach used.

**Data Used to Assess** 

Water Quality:

Significant amphipod toxicity in 2 of 4 tests. No significant urchin toxicity

(4 tests) (Hunt et al., 1998b).

**Spatial Representation:** Spatial distribution of samples is described in the report

**Temporal Representation:** Data collected during 4/95- 4/97.

Data Quality Assessment: Used BPTCP QA/QC.

Water Segment: Oakland Inner Harbor (Pacific Dry-dock Yard 1 Site, part of SF Bay, Central)

Pollutant: ppDDE

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.6 of the Listing Policy. Under section 4.6 two lines of evidence

are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. A sediment guideline is not available and it cannot be determined if the pollutant is likely to cause or contribute to the toxic effect.

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

This conclusion is based on the staff findings that:

1. A sediment quality guideline that complies with the requirements of section 6.1.3 of the Policy is not available.

- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. The sediments are toxic in 2 of 4 tests.
- 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of EvidencePollutant-SedimentBeneficial Use:ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

**Evaluation Guideline:** No applicable sediment guideline available.

**Data Used to Assess** 

Two measurements ranging in concentration from ND to 51.2 ng/g (Hunt

Water Quality: et al., 1998b).

**Spatial Representation:** Spatial distribution of samples is described in the report

**Temporal Representation:** Data collected in 1995. **Data Quality Assessment:** Used BPTCP QA/QC.

Numeric Line of Evidence Toxicity

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community

composition, or any other relevant measure of the health of an organism,

population, or community.

**Evaluation Guideline:** BPTCP reference envelope approach used.

Data Used to Assess Water Quality:

Significant amphipod toxicity in 2 of 4 tests. No significant urchin toxicity

(4 tests) (Hunt et al., 1998b).

**Spatial Representation:** Spatial distribution of samples is described in the report

**Temporal Representation:** Data collected during 4/95- 4/97.

Data Quality Assessment: Used BPTCP QA/QC.

Water Segment: Sacramento San Joaquin Delta

Pollutant: Diazinon

**Decision:** Delist

Weight of Evidence:

This pollutant is being considered for removal from the 303(d) list under section 4.6 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. The basis for listing in 1998 was ambient water toxicity and detections of diazinon in Bay waters. In the current assessment, the evaluation guideline available may not satisfy the requirements of the Listing Policy but even if the guideline were used all measurements are much lower than the recommended concentration. Recent measures of toxicity show that ambient water toxicity no longer exists in Bay waters. The RWQCB is also developing a Water Quality Attainment Strategy that calls for preventive actions to keep diazinon from entering the Bay.

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

This conclusion is based on the staff findings that:

- 1. The evaluation guideline may not comply with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. None of 83 samples exceeded the criteria and ambient water toxicity in the Bay appears to have disappeared. These frequencies do not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

## SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

ES - Estuarine Habitat **Beneficial Use:** 

Water Matrix:

Water Quality Objective/ **Water Quality Criterion:** 

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species. There shall be no acute toxicity in ambient waters. There shall be no chronic toxicity in ambient waters (SFBRWQCB, 1995).

For salt water, USEPA has developed a draft water quality criteria of 400 ng/L (chronic) (USEPA, 2000). The use of these values may not comply with all the requirements of section 6.1.3 of the Listing Policy.

**Evaluation Guideline:** CDFG Hazard Assessment Criteria 0.16 µg/L 1-hour average (acute),

0.10 µg/L 4-day (chronic) average (Siepman & Finlayson, 2000;

Finlayson, 2004).

**Data Used to Assess** Water Quality:

The maximum concentration observed in Regional Monitoring Program samples at the Sacramento River station was 46.6 ng/L (mean 8.5 ng/L). The maximum concentration observed in Regional Monitoring Program samples at the San Joaquin River station was 35.2 ng/L (mean 8.4 ng/L) (SFEI, 2001).

Two stations.

**Spatial Representation:** 

Temporal Representation: Samples were collected between 1993 and 2001.

**Data Quality Assessment:** SFEI Regional Monitoring Program QAPP (Lowe et al., 1998).

Narrative Description Data Line of Evidence

**Beneficial Use** ES - Estuarine Habitat

Information Used to **Assess Water Quality:**  In response to the RMP observations of ambient water toxicity, and given the linkage established between similar toxicity and pesticides in upstream ambient water, the SFBRWQCB identified all San Francisco Bay segments as being impaired due to Pesticides in 1998:

Pesticides have been added as a cause of impairment to all Bay segments. The pesticide diazinon has been measured at levels that cause water column toxicity. The pesticide chlorpyrifos may also be a problem. This listing is consistent with listing of the Delta for these pesticides by the Central Valley Regional Water Quality Control Board. This listing was subsequently made specific for the OP pesticide diazinon

by the USEPA.

Line of Evidence **Toxicity** 

ES - Estuarine Habitat **Beneficial Use** 

**Non-Numeric Objective:** Basin Plan: There shall be no acute toxicity in ambient waters. There

# Data Used to Assess Water Quality:

shall be no chronic toxicity in ambient waters (SFBRWQCB, 1995).

Ambient water toxicity in San Francisco Bay appears to have disappeared. The results of ambient water toxicity monitoring at Mallard Island indicate a significant reduction in the frequency, duration, and magnitude of toxicity: 4-5% of the ambient water samples were toxic in 1998-99 (34 total samples) and 1999-2000 (23 samples), relative to 14% toxicity frequency observed in 1997-98 (27 samples); none of the 28 samples collected during the 2000-2001 season were significantly toxic.

In addition, the 1998-2000 and 2000-2001 monitoring at Mallard Island did not document any sets of consecutively toxic samples indicative of an extended period of ambient water toxicity, such as were observed in February and May of 1998. Moreover, the magnitude of toxicity (as reflected by the degree [or percentage] of test organism mortality) is also markedly reduced in the later years, again suggesting a reduction in the degree of ambient water toxicity. Subsequent RMP monitoring of ambient water toxicity in water samples collected from October, 2001 through April 2003, also indicated an absence of toxicity to the test organisms (Ogle, 2004).

Water Segment: San Francisco Bay, Central

Pollutant: Diazinon

**Decision:** Delist

Weight of Evidence: This pollutant is be

This pollutant is being considered for delisting under sections 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. The basis for listing in 1998 was ambient water toxicity and detections of diazinon in Bay waters. In the current assessment, the evaluation guideline available may not satisfy the requirements of the Listing Policy but even if the guideline were used all measurements are much lower than the recommended concentration. Recent measures of toxicity show that ambient water toxicity no longer exists in Bay waters. The RWQCB is also developing a Water Quality Attainment Strategy that calls for preventive actions to keep diazinon from entering the Bay.

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

This conclusion is based on the staff findings that:

- 1. The evaluation guideline may not comply with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. None of the samples exceeded the draft guideline and ambient water toxicity in the Bay appears to have disappeared. These frequencies do not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

  5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

# SWRCB Staff Recommendation:

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

Numeric Line of Evidence Pollutant-Water

Beneficial Use: ES - Estuarine Habitat

Matrix: Water

Water Quality Objective/
Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species. There shall be no acute toxicity in ambient waters.

There shall be no chronic toxicity in ambient waters.

**Evaluation Guideline:** For salt water, USEPA has developed draft water quality criteria of 820

ng/L (acute) and 400 ng/L (chronic). The use of these values may not comply with all the requirements of section 6.1.3 of the Listing Policy.

Data Used to Assess Water Quality:

1st sample site: None of the 17 samples exceeded, pollutant range: 240-

32,000 pg/L, average: 3,555.0.

2nd sample site: None of the 16 samples exceeded, pollutant range: 370-

13,000 pg/L, average: 2,898.0 (SFEI, 2001).

**Spatial Representation:** Two sample sites.

**Temporal Representation:** 1st sample site: Date Range: 02/07/94-08/02/01.

2nd sample site: Date Range: 03/03/93-08/03/01

Data Quality Assessment: SFEI RMP QA/QC program.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: ES - Estuarine Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to.

decreased growth rate and decreased reproductive success of resident or indicator species. There shall be no acute toxicity in ambient waters.

There shall be no chronic toxicity in ambient waters.

**Evaluation Guideline:** For salt water, USEPA has developed draft water quality criteria of 820

ng/L (acute) and 400 ng/L (chronic). The use of these values may not comply with all the requirements of section 6.1.3 of the Listing Policy.

Data Used to Assess Water Quality:

1st sample site: None of the 18 samples exceeded, pollutant range: 240-

32,000 pg/L, average: 3,492.8.

2nd sample site: None of the 16 viable samples exceeded, pollutant

range: 370-13,000 pg/L, average: 2,907.5 (SFEI, 2001).

**Spatial Representation:** Two sample sites.

Temporal Representation: 1st sample site: Date Range: 02/07/94-08/02/01.

2nd sample site: Date Range: 03/03/93-08/03/01.

Data Quality Assessment: SFEI RMP QA/QC program.

Line of Evidence Toxicity

Beneficial Use ES - Estuarine Habitat

Non-Numeric Objective: Basin Plan: There shall be no acute toxicity in ambient waters. There

shall be no chronic toxicity in ambient waters.

Data Used to Assess Water Quality:

Ambient water toxicity in San Francisco Bay appears to have disappeared. The results of ambient water toxicity monitoring at Mallard Island indicate a significant reduction in the frequency, duration, and magnitude of toxicity: 4-5% of the ambient water samples were toxic in 1998-99 (34 total samples) and 1999-2000 (23 samples), relative to 14% toxicity frequency observed in 1997-98 (27 samples); none of the 28 samples collected during the 2000-2001 season were significantly toxic.

In addition, the 1998-2000 and 2000-2001 monitoring at Mallard Island did not document any sets of consecutively toxic samples indicative of an extended period of ambient water toxicity, such as were observed in February and May of 1998. The magnitude of toxicity (as reflected by the degree [or percentage] of test organism mortality) is also markedly reduced in the later years, indicating a reduction in the degree of ambient water toxicity. Subsequent RMP monitoring of ambient water toxicity in water samples collected from 10/2001 through 4/2003 also indicated an absence of toxicity to the test organisms (Ogle, 2004).

Line of Evidence

Narrative Description Data

Beneficial Use

ES - Estuarine Habitat

Information Used to Assess Water Quality:

In response to the RMP observations of ambient water toxicity, and given the linkage established between similar toxicity and pesticides in upstream ambient water, the SFBRWQCB identified all San Francisco Bay segments as being impaired due to Pesticides in 1998:

Pesticides have been added as a cause of impairment to all Bay segments. The pesticide diazinon has been measured at levels that cause water column toxicity. The pesticide chlorpyrifos may also be a problem. This listing is consistent with listing of the Delta for these pesticides by the Central Valley Regional Water Quality Control Board. This listing was subsequently made specific for the organophosphate pesticide diazinon by the USEPA.

**Non-Numeric Objective:** 

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species. There shall be no acute toxicity in ambient waters. There shall be no chronic toxicity in ambient waters.

Water Segment: San Francisco Bay, Lower

Pollutant: Diazinon

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

Policy. Under section 4.1 a single line of evidence is necessary to assess

listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. The basis for listing in 1998 was ambient water toxicity and detections of diazinon in Bay waters. In the current assessment, the evaluation guideline available may not satisfy the requirements of the Listing Policy but even if the guideline were used all measurements are much lower than the recommended concentration. Recent measures of toxicity show that ambient water toxicity no longer exists in Bay waters. The RWQCB is also developing a Water Quality Attainment Strategy that calls for preventive actions to keep diazinon from entering the Bay.

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

This conclusion is based on the staff findings that:

- 1. The evaluation guideline may not comply with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. None of the samples exceeded the draft guideline and ambient water toxicity in the Bay appears to have disappeared. These frequencies do not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

  5. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are met.

# SWRCB Staff Recommendation:

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

Numeric Line of Evidence Pollutant-Water

ES - Estuarine Habitat **Beneficial Use:** 

Water Matrix:

Water Quality Objective/ **Water Quality Criterion:** 

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident

or indicator species. There shall be no acute toxicity in ambient waters. There shall be no chronic toxicity in ambient waters.

For salt water, USEPA has developed draft water quality criteria of 820 **Evaluation Guideline:** 

> ng/L (acute) and 400 ng/L (chronic). The use of these values may not comply with all the requirements of section 6.1.3 of the Listing Policy.

**Data Used to Assess** 

Water Quality:

None of the 15 samples exceeded, pollutant range: 620-9,500 pg/L.

average: 2,801.1 (SFEI, 2001).

One sample site. **Spatial Representation:** 

Temporal Representation: Date Range: 2/3/94-8/3/01. Data Quality Assessment: SFEI RMP QA/QC program.

Numeric Line of Evidence Pollutant-Water

ES - Estuarine Habitat Beneficial Use:

Matrix: Water

Water Quality Objective/

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic **Water Quality Criterion:** organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident

or indicator species. There shall be no acute toxicity in ambient waters.

There shall be no chronic toxicity in ambient waters.

For salt water, USEPA has developed draft water quality criteria of 820 **Evaluation Guideline:** 

> ng/L (acute) and 400 ng/L (chronic). The use of these values may not comply with all the requirements of section 6.1.3 of the Listing Policy. Seventeen samples, pollutant range: 52-9,537 pg/L, average: 2,600.1

**Data Used to Assess** Water Quality:

(SFEI, 2001).

**Spatial Representation:** One sample site.

Temporal Representation: Date Range: 2/3/94-8/3/01. Data Quality Assessment: SFEI RMP QA/QC program.

Line of Evidence Narrative Description Data **Beneficial Use** ES - Estuarine Habitat

# Information Used to Assess Water Quality:

In response to the RMP observations of ambient water toxicity, and given the linkage established between similar toxicity and pesticides in upstream ambient water, the SFBRWQCB identified all San Francisco Bay segments as being impaired due to 'Pesticides' in 1998:

'Pesticides have been added as a cause of impairment to all Bay segments. The pesticide diazinon has been measured at levels that cause water column toxicity. The pesticide chlorpyrifos may also be a problem. This listing is consistent with listing of the Delta for these pesticides by the Central Valley Regional Water Quality Control Board.' This listing was subsequently made specific for the OP pesticide diazinon by the USEPA.

Line of Evidence

**Toxicity** 

**Beneficial Use** 

ES - Estuarine Habitat

**Non-Numeric Objective:** 

Basin Plan: There shall be no acute toxicity in ambient waters. There

shall be no chronic toxicity in ambient waters.

Data Used to Assess Water Quality:

Ambient water toxicity in San Francisco Bay appears to have disappeared. The results of ambient water toxicity monitoring at Mallard Island indicate a significant reduction in the frequency, duration, and magnitude of toxicity: 4-5% of the ambient water samples were toxic in 1998-99 (34 total samples) and 1999-2000 (23 samples), relative to 14% toxicity frequency observed in 1997-98 (27 samples); none of the 28 samples collected during the 2000-2001 season were significantly toxic.

In addition, the 1998-2000 and 2000-2001 monitoring at Mallard Island did not document any sets of consecutively toxic samples indicative of an extended period of ambient water toxicity, such as those which were observed in February and May of 1998. The magnitude of toxicity (as reflected by the degree [or percentage] of test organism mortality) is also markedly reduced in the later years, indicating a reduction in the degree of ambient water toxicity. Subsequent RMP monitoring of ambient water toxicity in water samples collected from 10/2001 through 4/2003 also indicated an absence of toxicity to the test organisms (Ogle, 2004).

Water Segment: San Francisco Bay, South

Pollutant: Diazinon

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for listing under sections 2.1 and 3.1 of the

Listing Policy. Under section 3.1 a single line of evidence is necessary to

assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. The basis for listing in 1998 was ambient water toxicity and detections of diazinon in Bay waters. In the current assessment, the evaluation guideline available may not satisfy the requirements of the Listing Policy but even if the guideline were used all measurements are much lower than the recommended concentration. Recent measures of toxicity show that ambient water toxicity no longer exists in Bay waters. The RWQCB is also developing a Water Quality Attainment Strategy that calls for preventive actions to keep diazinon from entering the Bay.

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

This conclusion is based on the staff findings that:

- 1. The evaluation guideline may not comply with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. None of samples exceeded the draft guideline and ambient water toxicity in the Bay appears to have disappeared. These frequencies do not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

# SWRCB Staff Recommendation:

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

Numeric Line of Evidence Pollutant-Water

Beneficial Use: ES - Estuarine Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species. There shall be no acute toxicity in ambient waters.

There shall be no chronic toxicity in ambient waters.

**Evaluation Guideline:** For salt water, USEPA has developed a draft water quality criteria of 820

ng/L (acute) and 400 ng/L (chronic). The use of these values may not comply with all the requirements of section 6.1.3 of the Listing Policy.

Data Used to Assess Water Quality:

1st sample site: 16 samples, pollutant range: 2,500-97,628 pg/L,

average: 10,862.3

2nd sample site: 17 samples, pollutant range: 610-18,426 pg/L, average:

5,814.1.

3rd sample site: 15 samples, pollutant range: 520-7,120 pg/L, average:

3,274.4.

4th sample site: 17 samples, pollutant range: 6,500-36,000 pg/L,

average: 14,867.1 (SFEI, 2001).

**Spatial Representation:** Four sample sites.

Temporal Representation: 1st sample site: Date Range: 02/01/94-07/31/01.

2nd sample site: Date Range: 03/02/93-08/01/01 3rd sample site: Date Range: 03/02/93-07/31/01 4th sample site: Date Range: 02/06/96-08/01/01

Data Quality Assessment: SFEI RMP QA/QC program.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: ES - Estuarine Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to,

decreased growth rate and decreased reproductive success of resident or indicator species. There shall be no acute toxicity in ambient waters.

There shall be no chronic toxicity in ambient waters.

**Evaluation Guideline:** For salt water, USEPA has developed draft water quality criteria of 820

ng/L (acute) and 400 ng/L (chronic). The use of these values may not comply with all the requirements of section 6.1.3 of the Listing Policy.

Data Used to Assess Water Quality:

1st sample site: 16 samples, pollutant range: 2,500-98,002 pg/L,

average: 11,066.5

2nd sample site: 17 samples, pollutant range: 610-18,469 pg/L, average:

5,881.1.

3rd sample site: 15 viable samples, pollutant range: 520-7,133 pg/L,

average: 3,288.8.

4th sample site: 12 viable samples, pollutant range: 6,500-36,150 pg/L,

average: 15,207.8 (SFEI, 2001).

**Spatial Representation:** Four sample sites.

Temporal Representation: 1st sample site: Date Range: 02/01/94-07/31/01.

2nd sample site: Date Range: 03/02/93-08/01/01 3rd sample site: Date Range: 03/02/93-07/31/01 4th sample site: Date Range: 02/06/96-08/01/01

Data Quality Assessment: SFEI RMP QA/QC program.

Line of Evidence Narrative Description Data

Beneficial Use ES - Estuarine Habitat

In response to the RMP observations of ambient water toxicity, and given the linkage established between similar toxicity and pesticides in upstream ambient water, the SFBRWQCB identified all San Francisco

Bay segments as being impaired due to Pesticides in 1998:

Pesticides have been added as a cause of impairment to all Bay segments. The pesticide diazinon has been measured at levels that cause water column toxicity. The pesticide chlorpyrifos may also be a problem. This listing is consistent with listing of the Delta for these pesticides by the Central Valley Regional Water Quality Control Board. This listing was subsequently made specific for the OP pesticide diazinon

by the USEPA.

**Line of Evidence** Toxicity

Beneficial Use ES - Estuarine Habitat

Non-Numeric Objective: Basin Plan: There shall be no acute toxicity in ambient waters. There

shall be no chronic toxicity in ambient waters.

Data Used to Assess Water Quality:

Ambient water toxicity in San Francisco Bay appears to have disappeared. The results of ambient water toxicity monitoring at Mallard Island indicate a significant reduction in the frequency, duration, and magnitude of toxicity: 4-5% of the ambient water samples were toxic in 1998-99 (34 total samples) and 1999-2000 (23 samples), relative to 14% toxicity frequency observed in 1997-98 (27 samples); none of the 28 samples collected during the 2000-2001 season were significantly toxic.

In addition, the 1998-2000 and 2000-2001 monitoring at Mallard Island did not document any sets of consecutively toxic samples indicative of an extended period of ambient water toxicity, such as were observed in February and May of 1998. Moreover, the magnitude of toxicity (as reflected by the degree [or percentage] of test organism mortality) is also markedly reduced in the later years, again suggesting a reduction in the degree of ambient water toxicity. Subsequent RMP monitoring of ambient water toxicity in water samples collected from October, 2001 through April 2003, also indicated an absence of toxicity to the test organisms

(Ogle, 2004).

Water Segment: San Leandro Bay (part of SF Bay, Central)

Pollutant: DDT

Decision: Delist

Weight of Evidence:

This pollutant is being considered for delisting under sections 4.6 and 4.9 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess listing status while under section 4.9, a minimum of two lines of evidence are needed to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant sediment toxicity but it cannot be determined if the pollutant is likely to cause or contribute to any toxic effect. The benthic community is not impacted.

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

This conclusion is based on the staff findings that:

- 1. No sediment quality guideline is available that complies with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

### Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community

composition, or any other relevant measure of the health of an organism,

population, or community.

**Evaluation Guideline:** BPTCP Reference envelope approach.

**Data Used to Assess** 

Water Quality:

Significant amphipod toxicity in 4 of 7 tests. Significant sea urchin toxicity

in 3 of 7 tests (Hunt et al., 1998b).

Spatial Representation: Data was synoptically collected with chemical and toxicity measurements

at 7 sampling sites.

Temporal Representation: Samples were collected during April 1995 and April 1997.

Data Quality Assessment: BPTCP Quality Assurance Project Plan.

Numeric Line of Evidence Population/Community Degradation

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism.

population, or community.

**Evaluation Guideline:** Evaluations of the benthic data were completed using the approaches

developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the

benthic community.

Data Used to Assess

Water Quality:

BPTCP benthic index values were 0.60, 0.60, 0.67, 1.0, and 0.66 (Hunt

et al, 1998b).

**Spatial Representation:** Five stations. Data was synoptically collected with chemical and toxicity

measurements.

Temporal Representation: Samples were collected in April 1995 and April 1997.

Data Quality Assessment: BPTCP Quality Assurance Project Plan.

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a

detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community

composition, or any other relevant measure of the health of an organism,

population, or community.

**Evaluation Guideline:** No sediment quality guideline is available that meets the requirements of

section 6.1.3 of the Listing Policy.

**Data Used to Assess** 

Seven measurements ranging in concentrations from 31.26 to 211.23 ppb (Hunt et al., 1998b).

Water Quality:

Data was synoptically collected with benthic community and toxicity **Spatial Representation:** 

measurements.

Temporal Representation: Samples were collected in April 1995 and April 1997.

Data Quality Assessment: BPTCP Quality Assurance Project Plan.

Water Segment: San Leandro Bay (part of SF Bay, Central)

Pollutant: Diazinon

**Decision:** Delist

Weight of Evidence:

This pollutant is being considered for delisting under sections 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. The basis for listing in 1998 was ambient water toxicity and detections of diazinon in Bay waters. In the current assessment, the evaluation guideline available may not satisfy the requirements of the Listing Policy. Even if the guideline were used, all measurements are much lower than the recommended concentration. Recent measures of toxicity show that ambient water toxicity no longer exists in Bay waters. The RWQCB is also developing a Water Quality Attainment Strategy that calls for preventive actions to keep diazinon from entering the Bay.

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

This conclusion is based on the staff findings that:

- 1. The evaluation guideline may not comply with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. None of samples exceeded the draft guideline and ambient water toxicity in the Bay appears to have disappeared. These frequencies do not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

# SWRCB Staff Recommendation:

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

Numeric Line of Evidence Pollutant-Water

ES - Estuarine Habitat **Beneficial Use:** 

Water Matrix:

Water Quality Objective/ **Water Quality Criterion:** 

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to,

decreased growth rate and decreased reproductive success of resident or indicator species. There shall be no acute toxicity in ambient waters.

There shall be no chronic toxicity in ambient waters.

For salt water, USEPA has developed draft water quality criteria of 820 **Evaluation Guideline:** 

> ng/L (acute) and 400 ng/L (chronic). The use of these values may not comply with all the requirements of section 6.1.3 of the Listing Policy.

**Data Used to Assess** Water Quality:

1st sample site: None of the 17 samples exceeded, pollutant range: 240-

32,000 pg/L, average: 3,555.0.

2nd sample site: None of the 16 samples exceeded, pollutant range: 370-

13,000 pg/L, average: 2,898.0 (SFEI, 2001).

**Spatial Representation:** Two sample sites.

Temporal Representation: 1st sample site: Date Range: 02/07/94-08/02/01.

2nd sample site: Date Range: 03/03/93-08/03/01

Data Quality Assessment: SFEI RMP QA/QC program.

Numeric Line of Evidence Pollutant-Water

**Beneficial Use:** ES - Estuarine Habitat

Matrix: Water

Water Quality Objective/ **Water Quality Criterion:** 

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms. Detrimental responses include, but are not limited to. decreased growth rate and decreased reproductive success of resident or indicator species. There shall be no acute toxicity in ambient waters.

There shall be no chronic toxicity in ambient waters.

For salt water, USEPA has developed draft water quality criteria of 820 **Evaluation Guideline:** 

ng/L (acute) and 400 ng/L (chronic). The use of these values may not comply with all the requirements of section 6.1.3 of the Listing Policy.

1st sample site: None of the 18 samples exceeded, pollutant range: 240-

**Data Used to Assess** Water Quality:

32.000 pg/L. average: 3.492.8.

2nd sample site: None of the 16 viable samples exceeded, pollutant

range: 370-13,000 pg/L, average: 2,907.5 (SFEI, 2001).

Two sample sites. **Spatial Representation:** 

Temporal Representation: 1st sample site: Date Range: 02/07/94-08/02/01.

2nd sample site: Date Range: 03/03/93-08/03/01.

Data Quality Assessment: SFEI RMP QA/QC program.

Line of Evidence Narrative Description Data

Beneficial Use ES - Estuarine Habitat

**Assess Water Quality:**Diazinon is one of the pollutants listed for this segment on the 2002 section 303(d) list. The data and information used to assess this pollutant-water segment is subsumed in diazinon listing for San Francisco Bay, Central. The conclusions drawn for San Francisco Bay,

Central should be applied to this segment.

Line of Evidence Toxicity

Beneficial Use ES - Estuarine Habitat

**Non-Numeric Objective:** Basin Plan: There shall be no acute toxicity in ambient waters. There

shall be no chronic toxicity in ambient waters.

Data Used to Assess
Water Quality:

Ambient water toxicity in San Francisco Bay appears to have disappeared. The results of ambient water toxicity monitoring

disappeared. The results of ambient water toxicity monitoring at Mallard Island indicate a significant reduction in the frequency, duration, and magnitude of toxicity: 4-5% of the ambient water samples were toxic in 1998-99 (34 total samples) and 1999-2000 (23 samples), relative to 14% toxicity frequency observed in 1997-98 (27 samples); none of the 28 samples collected during the 2000-2001 season were significantly toxic.

In addition, the 1998-2000 and 2000-2001 monitoring at Mallard Island did not document any sets of consecutively toxic samples indicative of an extended period of ambient water toxicity, such as were observed in February and May of 1998. The magnitude of toxicity (as reflected by the degree [or percentage] of test organism mortality) is also markedly reduced in the later years, indicating a reduction in the degree of ambient water toxicity. Subsequent RMP monitoring of ambient water toxicity in water samples collected from 10/2001 through 4/2003 also indicated an absence of toxicity to the test organisms (Ogle, 2004).

Line of Evidence Narrative Description Data

Beneficial Use ES - Estuarine Habitat

In response to the RMP observations of ambient water toxicity, and given the linkage established between similar toxicity and pesticides in upstream ambient water, the SFBRWQCB identified all San Francisco Bay segments as being impaired due to Pesticides in 1998:

Pesticides have been added as a cause of impairment to all Bay segments. The pesticide diazinon has been measured at levels that cause water column toxicity. The pesticide chlorpyrifos may also be a problem. This listing is consistent with listing of the Delta for these pesticides by the Central Valley Regional Water Quality Control Board. This listing was subsequently made specific for the organophosphate pesticide diazinon by the USEPA.

### **Non-Numeric Objective:**

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species. There shall be no acute toxicity in ambient waters. There shall be no chronic toxicity in ambient waters.

Water Segment: San Leandro Bay (part of SF Bay, Central)

Pollutant: Selenium

**Decision:** Delist

Weight of Evidence:

This pollutant is being considered for delisting under sections 4.6 and 4.9 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess listing status while under section 4.9, a minimum of two lines of evidence are needed to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site does has significant sediment toxicity but it cannot be determined if selenium (sediment) is likely to cause or contribute to any toxic effect.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing selenium (sediment) from the section 303(d) list from the Water Quality Limited Segments category for this water body.

This conclusion is based on the staff findings that:

- 1. No sediment quality guideline is available that complies with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

### Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community

composition, or any other relevant measure of the health of an organism,

population, or community.

**Evaluation Guideline:** BPTCP Reference envelope approach.

Data Used to Assess

Water Quality:

Significant amphipod toxicity in 4 of 7 tests. Significant sea urchin toxicity

in 3 of 7 tests (Hunt et al., 1998b).

**Spatial Representation:** Data was synoptically collected with chemical and toxicity measurements

at 7 sampling sites.

Temporal Representation: Samples were collected during April 1995 and April 1997.

Data Quality Assessment: BPTCP Quality Assurance Project Plan.

Numeric Line of Evidence Population/Community Degradation

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism,

composition, or any other relevant measure of the health of an organis

population, or community.

**Evaluation Guideline:** Evaluations of the benthic data were completed using the approaches

developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the

benthic community.

**Data Used to Assess** 

Water Quality:

BPTCP benthic index values were 0.60, 0.60, 0.67, 1.0, and 0.66 (Hunt

et al, 1998b).

**Spatial Representation:** Five stations. Data was synoptically collected with chemical and toxicity

measurements.

Temporal Representation: Samples were collected in April 1995 and April 1997.

Data Quality Assessment: BPTCP Quality Assurance Project Plan.

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic

organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a

detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community

composition, or any other relevant measure of the health of an organism,

population, or community.

**Evaluation Guideline:** No sediment quality guideline is available that meets the requirements of

section 6.1.3 of the Listing Policy.

**Data Used to Assess** 

Water Quality:

Seven measurements ranging in concentrations from 0.528 to 2.830 ppm

(Hunt et al., 1998b).

Spatial Representation: Data was synoptically collected with benthic community and toxicity

measurements.

Temporal Representation: Samples were collected in April 1995 and April 1997.

Data Quality Assessment: BPTCP Quality Assurance Project Plan.

Water Segment: San Pablo Bay

Pollutant: Diazinon

**Decision:** Delist

Weight of Evidence:

This pollutant is being considered for removal from the 303(d) list under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. The basis for listing in 1998 was ambient water toxicity and detections of diazinon in Bay waters. In the current assessment, the evaluation guideline available may not satisfy the requirements of the Listing Policy but even if the guideline were used all measurements are much lower than the recommended concentration. Recent measures of toxicity show that ambient water toxicity no longer exists in Bay waters. The RWQCB is also developing a Water Quality Attainment Strategy that calls for preventive actions to keep diazinon from entering the Bay.

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

This conclusion is based on the staff findings that:

- 1. The evaluation guideline may not comply with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. None of samples exceeded the draft guideline and ambient water toxicity in the Bay appears to have disappeared. These frequencies do not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

# SWRCB Staff Recommendation:

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

Numeric Line of Evidence Pollutant-Water

Beneficial Use: ES - Estuarine Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species. There shall be no acute toxicity in ambient waters.

There shall be no chronic toxicity in ambient waters.

**Evaluation Guideline:** For salt water, USEPA has developed a draft water quality criteria of 820

ng/L (acute) and 400 ng/L (chronic). The use of these values may not comply with all the requirements of section 6.1.3 of the Listing Policy.

Data Used to Assess Water Quality:

1st sample site: 19 samples, pollutant range: 200-44,000 pg/L, average:

6,236.5.

2nd sample site: 18 samples, pollutant range: 260-43,902 pg/L, average:

8,809.1.

3rd sample site: 15 samples, pollutant range: 370-31,000 pg/L, average:

5,918.5(SFEI, 2001).

**Spatial Representation:** Three sample sites.

Temporal Representation: 1st sample site: Date Range: 03/04/93-08/06/01.

2nd sample site: Date Range: 03/04/93-08/06/01 3rd sample site: Date Range: 03/04/93-08/06/01

Data Quality Assessment: SFEI RMP QA/QC program.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: ES - Estuarine Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species. There shall be no acute toxicity in ambient waters.

There shall be no chronic toxicity in ambient waters.

**Evaluation Guideline:** For salt water, USEPA has developed a draft water quality criteria of 820

ng/L (acute) and 400 ng/L (chronic). The use of these values may not comply with all the requirements of section 6.1.3 of the Listing Policy.

Data Used to Assess Water Quality:

1st sample site: 19 samples, pollutant range: 450-44,320 pg/L, average:

6.339.4.

2nd sample site: 18 samples, pollutant range: 260-43,958 pg/L, average:

8,897.5.

3rd sample site: 15 samples, pollutant range: 370-31,190 pg/L, average:

6,028.4 (SFEI, 2001).

**Spatial Representation:** Three sample sites.

Temporal Representation: 1st sample site: Date Range: 03/04/93-08/06/01.

2nd sample site: Date Range: 03/04/93-08/06/01 3rd sample site: Date Range: 03/04/93-08/06/01

Data Quality Assessment: SFEI RMP QA/QC program.

Line of EvidenceNarrative Description DataBeneficial UseES - Estuarine Habitat

Information Used to Assess Water Quality:

In response to the RMP observations of ambient water toxicity, and given the linkage established between similar toxicity and pesticides in upstream ambient water, the SFBRWQCB identified all San Francisco Bay segments as being impaired due to 'Pesticides' in 1998:

'Pesticides have been added as a cause of impairment to all Bay segments. The pesticide diazinon has been measured at levels that cause water column toxicity. The pesticide chlorpyrifos may also be a problem. This listing is consistent with listing of the Delta for these pesticides by the Central Valley Regional Water Quality Control Board.' This listing was subsequently made specific for the OP pesticide diazinon by the USEPA.

Line of Evidence Toxicity

Beneficial Use ES - Estuarine Habitat

**Non-Numeric Objective:** Basin Plan: There shall be no acute toxicity in ambient waters. There

shall be no chronic toxicity in ambient waters.

Data Used to Assess Water Quality:

Ambient water toxicity in San Francisco Bay appears to have disappeared. The results of ambient water toxicity monitoring at Mallard Island indicate a significant reduction in the frequency, duration, and magnitude of toxicity: 4-5% of the ambient water samples were toxic in 1998-99 (34 total samples) and 1999-2000 (23 samples), relative to 14% toxicity frequency observed in 1997-98 (27 samples); none of the 28 samples collected during the 2000-2001 season were significantly toxic.

In addition, the 1998-2000 and 2000-2001 monitoring at Mallard Island did not document any sets of consecutively toxic samples indicative of an extended period of ambient water toxicity, such as were observed in February and May of 1998. Moreover, the magnitude of toxicity (as reflected by the degree [or percentage] of test organism mortality) is also markedly reduced in the later years, again suggesting a reduction in the degree of ambient water toxicity. Subsequent RMP monitoring of ambient water toxicity in water samples collected from October 2001 through April 2003, also indicated an absence of toxicity to the test organisms.

Water Segment: Suisun Bay

Pollutant: Diazinon

**Decision:** Delist

Weight of Evidence:

This pollutant is being considered for removal from the 303(d) list under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. The basis for listing in 1998 was ambient water toxicity and detections of diazinon in Bay waters. In the current assessment, the evaluation guideline available may not satisfy the requirements of the Listing Policy but even if the guideline were used all measurements are much lower than the recommended concentration. Recent measures of toxicity show that ambient water toxicity no longer exists in Bay waters. The RWQCB is also developing a Water Quality Attainment Strategy that calls for preventive actions to keep diazinon from entering the Bay.

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

This conclusion is based on the staff findings that:

- 1. The evaluation guideline may not comply with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. None of samples exceeded the draft guideline and ambient water toxicity in the Bay appears to have disappeared. These frequencies do not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

# SWRCB Staff Recommendation:

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

Numeric Line of Evidence Pollutant-Water

ES - Estuarine Habitat **Beneficial Use:** 

Water Matrix:

Water Quality Objective/ **Water Quality Criterion:** 

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species. There shall be no acute toxicity in ambient waters.

There shall be no chronic toxicity in ambient waters.

For salt water, USEPA has developed a draft water quality criteria of 820 **Evaluation Guideline:** 

> ng/L (acute) and 400 ng/L (chronic). The use of these values may not comply with all the requirements of section 6.1.3 of the Listing Policy.

**Data Used to Assess** 

Water Quality:

Seventeen samples, pollutant range: 540-58,000 pg/L, average: 7,288.6

(SFEI, 2001).

One sample site. **Spatial Representation:** 

Temporal Representation: Date Range: 03/05/93-08/08/01. Data Quality Assessment: SFEI RMP QA/QC program.

Numeric Line of Evidence Pollutant-Water

ES - Estuarine Habitat Beneficial Use:

Matrix: Water

Water Quality Objective/

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic **Water Quality Criterion:** organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident

or indicator species. There shall be no acute toxicity in ambient waters.

There shall be no chronic toxicity in ambient waters.

For salt water, USEPA has developed a draft water quality criteria of 820 **Evaluation Guideline:** 

> ng/L (acute) and 400 ng/L (chronic). The use of these values may not comply with all the requirements of section 6.1.3 of the Listing Policy.

Seventeen samples, pollutant range: 540-58,350 pg/L, average: 7,332.4

**Data Used to Assess** Water Quality:

(SFEI, 2001).

One sample site. **Spatial Representation:** 

Temporal Representation: Date Range: 03/05/93-08/08/01. Data Quality Assessment: SFEI RMP QA/QC program.

Line of Evidence Narrative Description Data **Beneficial Use** ES - Estuarine Habitat

# Information Used to Assess Water Quality:

In response to the RMP observations of ambient water toxicity, and given the linkage established between similar toxicity and pesticides in upstream ambient water, the SFBRWQCB identified all San Francisco Bay segments as being impaired due to 'Pesticides' in 1998:

'Pesticides have been added as a cause of impairment to all Bay segments. The pesticide diazinon has been measured at levels that cause water column toxicity. The pesticide chlorpyrifos may also be a problem. This listing is consistent with listing of the Delta for these pesticides by the Central Valley Regional Water Quality Control Board.' This listing was subsequently made specific for the organophosphate pesticide diazinon by the USEPA.

Line of Evidence

**Toxicity** 

**Beneficial Use** 

ES - Estuarine Habitat

**Non-Numeric Objective:** 

Basin Plan: There shall be no acute toxicity in ambient waters. There

shall be no chronic toxicity in ambient waters.

Data Used to Assess Water Quality:

Ambient water toxicity in San Francisco Bay appears to have disappeared. The results of ambient water toxicity monitoring at Mallard Island indicate a significant reduction in the frequency, duration, and magnitude of toxicity: 4-5% of the ambient water samples were toxic in 1998-99 (34 total samples) and 1999-2000 (23 samples), relative to 14% toxicity frequency observed in 1997-98 (27 samples); none of the 28 samples collected during the 2000-2001 season were significantly toxic.

In addition, the 1998-2000 and 2000-2001 monitoring at Mallard Island did not document any sets of consecutively toxic samples indicative of an extended period of ambient water toxicity, such as were observed in February and May of 1998. Moreover, the magnitude of toxicity (as reflected by the degree [or percentage] of test organism mortality) is also markedly reduced in the later years, again suggesting a reduction in the degree of ambient water toxicity. Subsequent RMP monitoring of ambient water toxicity in water samples collected from October 2001 through April 2003, also indicated an absence of toxicity to the test organisms (Ogle, 2004).

# San Francisco Bay Region (2)

# Area Change

Recommendations to change the area affected by pollutants on the section 303(d) List

Water Segment: San Francisco Bay, Lower

**Pollutant:** 

**Decision:** Accept Area Change

Weight of Evidence: The data and information in the administrative record supports this change in

estimated size affected.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes

that the estimated size affected should be changed as presented.

**Lines of Evidence:** 

Line of Evidence Narrative Description Data

Beneficial Use ES - Estuarine Habitat, WI - Wildlife Habitat

Data Used to Assess Water

Quality:

The spatial definitions of San Francisco Bay, Lower and San Francisco Bay, South should be changed to conform with the NHD and CalWater 2.2 definitions of those two bay segments (i.e., make the border between the two at the Dumbarton Bridge). The attached shapefile is in Teale Albers, NAD27 and should be easily merged into the existing GeoWBS

bay shapefile.

Water Segment: San Francisco Bay, South

Pollutant:

**Decision:** Accept Area Change

Weight of Evidence: The data and information in the administrative record supports this change in

estimated size affected.

SWRCB Staff

Recommendation:

After review of the available data and information, SWRCB staff concludes

that the estimated size affected should be changed as presented.

Lines of Evidence:

Line of Evidence Narrative Description Data

Beneficial Use ES - Estuarine Habitat, WI - Wildlife Habitat

Data Used to Assess Water

Quality:

The spatial definitions of San Francisco Bay, Lower and San Francisco Bay, South should be changed to conform with the NHD and CalWater 2.2 definitions of those two bay segments (i.e., make the border between the two at the Dumbarton Bridge). The attached shapefile is in Teale Albers, NAD27 and should be easily merged into the existing GeoWBS

bay shapefile.

Page left blank intentionally.

# Fact Sheets Supporting Revision of the Section 303(d) List



November 2006

## **Table of Contents**

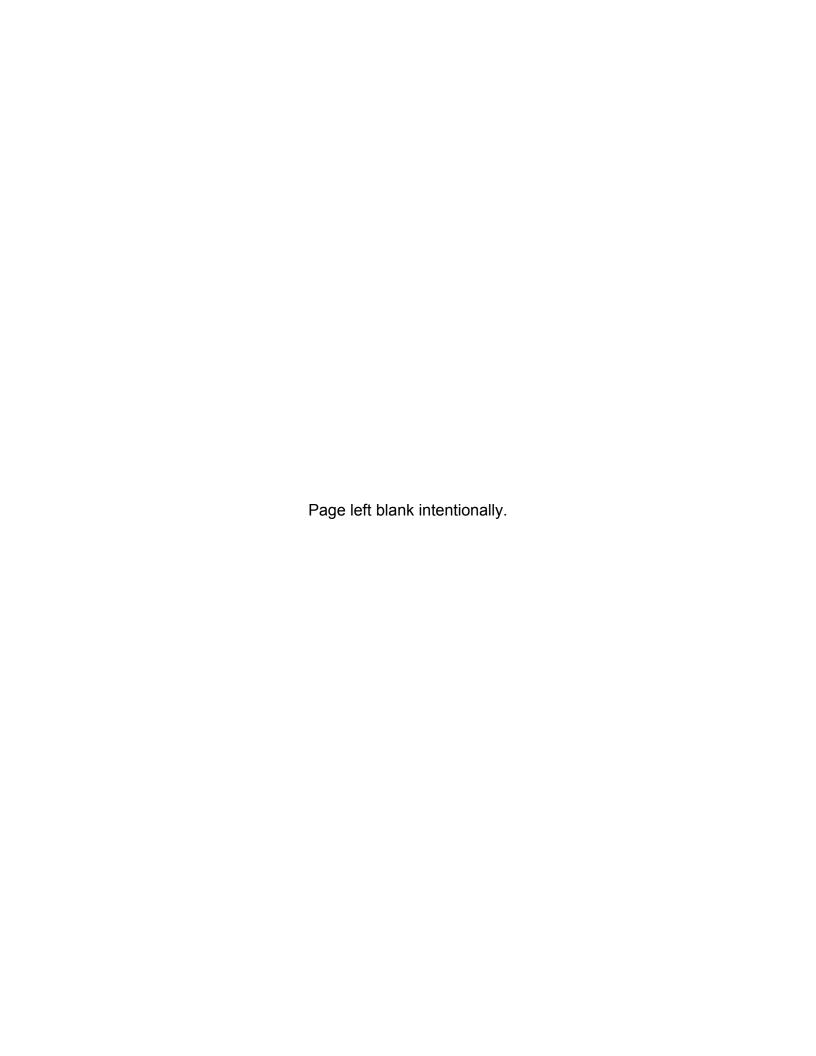
V	EW OR REVISED FACT SHEETS	7
	LISTING RECOMMENDATIONS	8
	San Luis Obispo Creek (Below W Marsh Street)	9
	Nutrients	9
	Santa Rita Creek (Monterey County)	10
	Nitrate as Nitrate (NO3)	10
	LIST AS BEING ADDRESSED RECOMMENDATIONS	12
	Carbonera Creek	13
	Nutrients	
	Sedimentation/Siltation	
	Chorro Creek	
	Fecal Coliform	
	Sedimentation/Siltation	
	Chumash Creek	
	Fecal Coliform	
	Dairy Creek	
	Fecal Coliform	
	Oxygen Saturation - Low Dissolved OxygenLlagas Creek	20
	Nutrients	22 22
	Sedimentation/Siltation	
	Lompico Creek	
	Nutrients	
	Sedimentation/Siltation	
	Los Osos Creek	26
	Fecal Coliform	
	Nutrients	
	Sediment	
	Morro Bay	
	Pathogens	
	Sedimentation/Siltation	
	Pajaro River	
	Sedimentation/Siltation	
	Pennington Creek	J2
	Fecal Coliform	
	Rider Creek	
	Sedimentation/Siltation	
	San Benito River	
	Sedimentation/Siltation	
	San Bernardo Creek	36
	Fecal Coliform	
	San Lorenzo River	
	Nutrients	37

Sediment	38
San Luis Obispo Creek (Below W Marsh Street)	
Pathogens	
San Luisito Creek	40
Total Fecal Coliform	40
Shingle Mill Creek	
Nutrients	
Sedimentation/Siltation	
Walters Creek	
Fecal Coliform	
Warden Creek	
Fecal Coliform	
Watsonville Slough	
Pathogens	
ORIGINAL FACT SHEETS	47
LISTING RECOMMENDATIONS	48
Arroyo Paredon	
Boron	
Nitrate as Nitrate (NO3)	
Toxicity	53
Bell Creek (Santa Barbara Co)	55
Nitrate as Nitrate (NO3)	55
Bradley Canyon Creek	57
Ammonia (Unionized) - Toxin	57
Nitrate as Nitrate (NO3)	59
Bradley Channel	61
Nitrate as Nitrate (NO3)	61
Canada De La Gaviota	63
Boron	63
Carneros Creek	65
Ammonia (Unionized) - Toxin	65
Casmalia Canyon Creek	
Sedimentation/Siltation	67
Chorro Creek	69
Oxygen, Dissolved	69
Cuyama River	
Boron	
Franklin Creek	
Nitrate as Nitrate (NO3)	
Gabilan Creek	
Nitrate as Nitrate (NO3)	
Glen Annie Canyon	
Nitrate as Nitrate (NO3)	
Llagas Creek	
Nitrate as Nitrate (NO3)	79
Main Street Canal	
Ammonia (Unionized) - Toxin	
Moro Cojo Slough	
Ammonia (Unionized) - Toxin	

Morro Bay	85
Oxygen, Dissolved	85
Natividad Creek	87
Nitrate as Nitrate (NO3)	87
Old Salinas River Estuary	89
Ammonia (Unionized) - Toxin	
Orcutt Creek	
Ammonia (Unionized) - Toxin	
Chlorpyrifos	
DDT	
Dieldrin	
Oso Flaco Creek	
Ammonia (Unionized) - Toxin	
Oso Flaco Lake	
Dieldrin	
Pajaro River	
Boron	
Prefumo Creek	
Nitrate as Nitrate (NO3)	
Quail Creek	
Nitrate as Nitrate (NO3)	
Rincon Creek	
Boron	
Toxicity	
Salinas Reclamation Canal	
Ammonia (Unionized) - Toxin	
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds	
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)	121
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)	121 121
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)	121 121 123
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)  Nitrate as Nitrate (NO3)  Toxaphene  San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy	121 121 123 135 to
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)  Nitrate as Nitrate (NO3)  Toxaphene  San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy downstream at Railroad Bridge)	121 121 123 135 to 125
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)  Nitrate as Nitrate (NO3)  Toxaphene  San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy downstream at Railroad Bridge).  Ammonia as Nitrogen	121 121 123 135 to 125 125
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)  Nitrate as Nitrate (NO3)  Toxaphene  San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy downstream at Railroad Bridge)  Ammonia as Nitrogen  Nitrogen, Nitrite	121 121 123 135 to 125 125 127
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)  Nitrate as Nitrate (NO3)  Toxaphene  San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy downstream at Railroad Bridge)  Ammonia as Nitrogen  Nitrogen, Nitrite  San Diego Creek	121 121 123 135 to 125 125 127 129
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)  Nitrate as Nitrate (NO3)  Toxaphene  San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy downstream at Railroad Bridge).  Ammonia as Nitrogen  Nitrogen, Nitrite  San Diego Creek  Toxaphene	121 123 135 to 125 125 127 129
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)  Nitrate as Nitrate (NO3)  Toxaphene  San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy downstream at Railroad Bridge)  Ammonia as Nitrogen  Nitrogen, Nitrite  San Diego Creek  Toxaphene  San Luis Obispo Creek	121 123 135 to 125 125 127 129 129
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)  Nitrate as Nitrate (NO3)  Toxaphene  San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy downstream at Railroad Bridge)  Ammonia as Nitrogen  Nitrogen, Nitrite  San Diego Creek  Toxaphene  San Luis Obispo Creek  Nitrate as Nitrate (NO3)	121 123 135 to 125 125 127 129 129 131
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)  Nitrate as Nitrate (NO3)  Toxaphene  San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy downstream at Railroad Bridge)  Ammonia as Nitrogen  Nitrogen, Nitrite  San Diego Creek  Toxaphene  San Luis Obispo Creek  Nitrate as Nitrate (NO3)  San Vicente Creek	121123 135 to125125127129129131133
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)  Nitrate as Nitrate (NO3)  Toxaphene  San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy downstream at Railroad Bridge)  Ammonia as Nitrogen  Nitrogen, Nitrite  San Diego Creek  Toxaphene  San Luis Obispo Creek  Nitrate as Nitrate (NO3)  San Vicente Creek  Sedimentation/Siltation	121123 135 to125125127129129131131133
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)  Nitrate as Nitrate (NO3)  Toxaphene  San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy downstream at Railroad Bridge)  Ammonia as Nitrogen  Nitrogen, Nitrite  San Diego Creek  Toxaphene  San Luis Obispo Creek  Nitrate as Nitrate (NO3)  San Vicente Creek  Sedimentation/Siltation  Santa Maria River	121 123 135 to 125 125 127 129 129 131 133 133
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)	121 123 135 to 125 125 127 129 129 131 131 133 133 137
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)  Nitrate as Nitrate (NO3)  Toxaphene  San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy downstream at Railroad Bridge)  Ammonia as Nitrogen  Nitrogen, Nitrite  San Diego Creek  Toxaphene  San Luis Obispo Creek  Nitrate as Nitrate (NO3)  San Vicente Creek  Sedimentation/Siltation  Santa Maria River  Ammonia (Unionized) - Toxin  Chlorpyrifos	121123 135 to125125127129129131131133133137137
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)  Nitrate as Nitrate (NO3)  Toxaphene  San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy downstream at Railroad Bridge)  Ammonia as Nitrogen  Nitrogen, Nitrite  San Diego Creek  Toxaphene  San Luis Obispo Creek  Nitrate as Nitrate (NO3)  San Vicente Creek  Sedimentation/Siltation  Santa Maria River  Ammonia (Unionized) - Toxin  Chlorpyrifos  DDT	121123 135 to125125127129131131133137137137
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)	121 123 135 to 125 125 127 129 129 131 131 133 137 137 139 142 150
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)  Nitrate as Nitrate (NO3)  Toxaphene  San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy downstream at Railroad Bridge)  Ammonia as Nitrogen  Nitrogen, Nitrite  San Diego Creek  Toxaphene  San Luis Obispo Creek  Nitrate as Nitrate (NO3)  San Vicente Creek  Sedimentation/Siltation  Santa Maria River  Ammonia (Unionized) - Toxin  Chlorpyrifos  DDT  Dieldrin  Endrin	121 123 135 to 125 125 127 129 129 131 133 133 137 137 139 142 150 154
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)	121123 135 to125125127129129131131133137137137139150156
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)	121123 135 to125125127129131131133137137137139150156156
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)  Nitrate as Nitrate (NO3)  Toxaphene  San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy downstream at Railroad Bridge)  Ammonia as Nitrogen  Nitrogen, Nitrite  San Diego Creek  Toxaphene  San Luis Obispo Creek  Nitrate as Nitrate (NO3)  San Vicente Creek  Sedimentation/Siltation  Santa Maria River  Ammonia (Unionized) - Toxin  Chlorpyrifos  DDT  Dieldrin  Endrin  Santa Ynez River (below city of Lompoc to Ocean)  Nitrate as Nitrate (NO3)  Shuman Canyon Creek	121123 135 to125125127129131131133137137137137136156156
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)	121 123 135 to 125 125 127 129 129 131 133 133 137 137 137 150 156 156 158

Ammonia (Unionized) - Toxin	
Ammonia (Unionized) - Toxin	
Delisting Recommendations	164
Blosser Channel	_
Fecal Coliform	
Carpinteria Marsh (El Estero Marsh)	
Sedimentation/Siltation	
Chumash Creek	
Oxygen, Dissolved	
Espinosa Slough	
Nutrients	
Goleta Slough/Estuary	
Metals	
Sedimentation/Siltation	
Monterey Bay South (Coastline)	
Metals	
Pesticides	
Morro Bay	
Metals	
Salinas Reclamation Canal	
Nitrogen, Nitrate	184
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds	
30910 and 30920)	
Sedimentation/Siltation	
Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento Rive	
Sedimentation/Siltation	
Salinas River Lagoon (North)	188
Sedimentation/Siltation	
Salinas River Refuge Lagoon (South)	
Nutrients	189
Pesticides	191
Salinity/TDS/Chlorides	192
San Antonio Creek (South Coast Watershed)	193
Sedimentation/Siltation	193
San Luis Obispo Creek (Below W Marsh Street)	195
Priority Organics	
Waddell Creek, East Branch	
Nutrients	
Watsonville Slough	
Sedimentation/Siltation	
AREA CHANGE RECOMMENDATIONS	202
Alamo Creek	
Los Osos Creek	
Orcutt Creek	
Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)	
Total Coliform	206
Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara	
County)	
Coliform Bacteria	208

Pacific Ocean at Jalama Beach (Santa Barbara County)		
Bacteria	210	
Rider Creek	211	
Salinas Reclamation Canal	212	

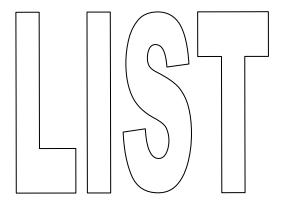


# Central Coast Region (3)

# Rewised Ract Sheets

New or Revised Fact Sheets

# Central Coast Region (3)



Recommendations to place waters and pollutants on the section 303(d) List

Water Segment: San Luis Obispo Creek (Below W Marsh Street)

Pollutant: Nutrients

**Decision:** List

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The San Luis Obispo Creek Nutrient TMDL was approved by the RWQCB in September of 2005 and

subsequently approved by USEPA.

Water Segment: Santa Rita Creek (Monterey County)

Pollutant: Nitrate as Nitrate (NO3)

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this

pollutant. Three measurements exceed the water quality objective.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three of 12 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

pollutant contributes to or causes the problem.

### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22,

Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as

NO3) in Domestic or Municipal Supply is 45 mg/L).

Data Used to Assess Water

Quality:

Three out of 12 samples exceeded the water quality objective for nitrate

(as NO3) for municipal and domestic supply (CCAMP, 2004).

Spatial Representation: Samples were collected from one site, SR1. Note that this site is a City of

Salinas storm water permit monitoring site and therefore, it is monitored

during storm water events.

Temporal Representation: Samples were collected from December 1999 through November 2000.

Environmental Conditions: Water body is located in the Salinas hydrologic unit.

Data Quality Assessment: City of Salinas storm water permit monitoring site. CCAMP, SWAMP.

# Central Coast Region (3)

# LIST AS BENGADORESED

Recommendations to place waters and pollutants on the Being Addressed category of the section 303(d) List

Water Segment: Carbonera Creek

Pollutant: Nutrients

**Decision:** List in Being Addressed Category

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to

result in attainment of the standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

**Lines of Evidence:** 

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Information Used to Assess

Water Quality:

A TMDL was approved by USEPA on January 14, 2003. The RWQCB is

tracking the implementation of the TMDL through the Nitrate Management Plan being implemented by Santa Cruz County.

Water Segment: Carbonera Creek

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The San Lorenzo Sediment TMDL was

approved by the RWQCB in May of 2003 and subsequently approved by

USEPA.

Water Segment: Chorro Creek

Pollutant: Fecal Coliform

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.2 of the Listing

Policy. Under section 4.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. One hundred ninety-three of 869 samples exceed the water quality objectives, and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. However, a TMDL is in place to address this pollutant in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during

any 30-day period exceed 400/100 ml.

Data Used to Assess Water

Quality:

One hundred ninety-three of 869 samples exceed the water quality

objectives.

Spatial Representation: Six stations were sampled.

There were weekly or bi-weekly sampling events from 6/93 to 5/99.

Data Quality Assessment: Morro Bay National Monitoring Program (MBNMP) QA/QC.

Line of EvidenceRemedial Program in PlaceBeneficial UseR1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Pathogens TMDL was

approved by RWQCB on May 16, 2003 and subsequently approved by

Water Segment: Chorro Creek

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Sediment TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by

Water Segment: Chumash Creek

Pollutant: Fecal Coliform

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.2 of the Listing

Policy. Under section 4.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

Two lines of evidence are available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Seventy of 246 samples exceed the water quality objective, and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. However, a TMDL is in place to address this pollutant in this water body. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

## SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Basin Plan: Fecal coliform concentration, based on minimum of not less Water Quality Criterion: than five samples or any 30-day period, shall not exceed a log mean of

than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during

any 30-day period exceed 400/100 ml.

Data Used to Assess Water

Quality:

Seventy of 246 samples exceed the water quality objective.

Spatial Representation: One station was monitored on Chumash Creek.

Temporal Representation: Weekly and bi-weekly sampling events occurred from 6/93 to 5/99.

Data Quality Assessment: Morro Bay National Monitoring Program.

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Pathogens TMDL was

approved by RWQCB on May 16, 2003 and subsequently approved by

Water Segment: Dairy Creek

Pollutant: Fecal Coliform

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

**Line of Evidence** Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation, R2 - Non-Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Pathogens TMDL was

approved by RWQCB on May 16, 2003 and subsequently approved by

Water Segment: Dairy Creek

Pollutant: Oxygen Saturation - Low Dissolved Oxygen

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

**Lines of Evidence:** 

Line of Evidence Remedial Program in Place

Beneficial Use CO - Cold Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Dairy Creek Dissolved Oxygen

TMDL was approved by the RWQCB in December of 2004 and

subsequently approved by USEPA.

Water Segment: Llagas Creek

Pollutant: Nutrients

**Decision:** List in Being Addressed Category

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use AG - Agricultural Supply

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Pajaro River Nutrients TMDL was

approved by the RWQCB in December of 2005 and subsequently

approved by USEPA.

Water Segment: Llagas Creek

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Pajaro River Sedimentation/Siltation

TMDL was approved by the RWQCB in December of 2005 and

subsequently approved by USEPA.

Water Segment: Lompico Creek

Pollutant: Nutrients

**Decision:** List in Being Addressed Category

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to

result in attainment of the standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MU - Municipal & Domestic, WA - Warm Freshwater Habitat

Information Used to Assess

Water Quality:

A TMDL was approved by USEPA on January 14, 2003. The RWQCB is

tracking the implementation of the TMDL through the Nitrate Management Plan being implemented by Santa Cruz County.

Water Segment: Lompico Creek

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The San Lorenzo Sediment TMDL was approved by the RWQCB in May of 2003 and subsequently approved by

USEPA.

Water Segment: Los Osos Creek

Pollutant: Fecal Coliform

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation, R2 - Non-Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Pathogens TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by

Water Segment: Los Osos Creek

Pollutant: Nutrients

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

**Line of Evidence** Remedial Program in Place

Beneficial Use AG - Agricultural Supply, WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Osos Creek Nutrients TMDL was approved by the RWQCB in December of 2004 and subsequently

approved by USEPA.

Water Segment: Los Osos Creek

Pollutant: Sediment

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Sediment TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by

Water Segment: Morro Bay

Pollutant: Pathogens

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation, R2 - Non-Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Pathogens TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by

Water Segment: Morro Bay

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use ES - Estuarine Habitat

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Sediment TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by

Water Segment: Pajaro River

Pollutant: Nutrients

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Pajaro River Nutrients TMDL was approved by the RWQCB in December of 2005 and subsequently

approved by USEPA.

Water Segment: Pajaro River

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

beneficial use CO - Cold Freshwater Habita

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Pajaro River Siltation/Sedimentation

TMDL was approved by the RWQCB in December of 2005 and

subsequently approved by USEPA.

Water Segment: Pennington Creek

Pollutant: Fecal Coliform

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation, R2 - Non-Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Pathogens TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by

Water Segment: Rider Creek

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseCO - Cold Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Pajaro River Siltation/Sedimentation

TMDL was approved by the RWQCB in December of 2005 and

subsequently approved by USEPA.

Water Segment: San Benito River

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

**Line of Evidence** Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Pajaro River Sedimentation/Siltation

TMDL was approved by the RWQCB in December of 2005 and

subsequently approved by USEPA.

Water Segment: San Bernardo Creek

Pollutant: Fecal Coliform

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 and 3.2 of the

Listing Policy. Under these sections of the Policy, a minimum of one line of

evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation, R2 - Non-Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Pathogens TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by

Water Segment: San Lorenzo River

Pollutant: Nutrients

**Decision:** List in Being Addressed Category

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to

result in attainment of the standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Information Used to Assess

Water Quality:

A TMDL was approved by USEPA on January 14, 2003. The RWQCB is

tracking the implementation of the TMDL through the Nitrate

Management Plan (adopted into the Basin Plan) being implemented by

Santa Cruz County.

Water Segment: San Lorenzo River

Pollutant: Sediment

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use AG - Agricultural Supply

Information Used to Assess

Water Quality:

The San Lorenzo River Sediment TMDL for this water segment-pollutant

combination was approved by the RWQCB in May 2003. USEPA

approved the TMDL on February 19, 2004.

Water Segment: San Luis Obispo Creek (Below W Marsh Street)

Pollutant: Pathogens

**Decision:** List in Being Addressed Category

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR1 - Water Contact Recreation

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The San Luis Obispo Creek Pathogen

TMDL was approved by the RWQCB in December of 2004 and

subsequently approved by USEPA.

Water Segment: San Luisito Creek

Pollutant: Total Fecal Coliform

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation, R2 - Non-Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Pathogens TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by

Water Segment: Shingle Mill Creek

Pollutant: Nutrients

**Decision:** List in Being Addressed Category

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to

result in attainment of the standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseWA - Warm Freshwater Habitat

Information Used to Assess

Water Quality:

A TMDL was approved by USEPA on January 14, 2003. The RWQCB is

tracking the implementation of the TMDL through the Nitrate Management Plan being implemented by Santa Cruz County.

Water Segment: Shingle Mill Creek

Pollutant: Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

**Line of Evidence** Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The San Lorenzo River Sediment TMDL

was approved by the RWQCB in May of 2003 and subsequently

approved by USEPA.

Water Segment: Walters Creek

Pollutant: Fecal Coliform

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Pathogens TMDL was

approved by the RWQCB in May of 2003 and subsequently approved by

USEPA.

Water Segment: Warden Creek

Pollutant: Fecal Coliform

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation, R2 - Non-Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Pathogens TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by

USEPA on January 20, 2004.

Water Segment: Watsonville Slough

Pollutant: Pathogens

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Watsonville Slough Pathogens

TMDL was approved by the RWQCB in March of 2006 and subsequently

approved by USEPA.

Page left blank intentionally.

# Central Coast Region (3)

# Original Fact Sheets

Fact Sheets Not Changed from September 2005 Version

# Central Coast Region (3)



Recommendations to place waters and pollutants on the section 303(d) List

Water Segment: Arroyo Paredon

Pollutant: Boron

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Nine of 16 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Region 3 Basin Plan, Section II.A.2 Objectives for all inland surface waters, enclosed bay, and estuaries, page III-5). In Table 3-4 of the Basin Plan (page III-9), the maximum concentration for boron for irrigation supply is

0.75 mg/L.

Data Used to Assess Water

Quality:

Nine out of 16 samples exceeded the water quality objective for agricultural water use/ irrigation supply for boron (SWAMP, 2004;

CCAMP, 2004).

Spatial Representation: Samples were collected from one site.

Temporal Representation: Samples were collected from January 2001 through March 2002.

The water body is located in the South Coast hydrologic unit, South Coast hydrologic area, and Carpinteria hydrologic subarea. The site **Environmental Conditions:** 

location is Arroyo Paredon Creek at Via Real (315APC).

CCAMP, SWAMP QAPP. Data Quality Assessment:

Water Segment: Arroyo Paredon

**Pollutant:** Nitrate as Nitrate (NO3)

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Fourteen of 16 samples exceeded the MCL and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in Water Quality Criterion: water Shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title

excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as

NO3) in Domestic or Municipal Supply is 45 mg/L.

Data Used to Assess Water

Quality:

Fourteen out of 16 samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (SWAMP, 2004;

CCAMP, 2004).

Spatial Representation: Samples were collected from one site.

Temporal Representation: Samples were collected from January 2001 through March 2002.

The water body is located in the South Coast hydrologic unit, South Coast hydrologic area, and Carpinteria hydrologic subarea. The site location is Arroyo Paredon Creek at Via Real (315APC). **Environmental Conditions:** 

CCAMP, SWAMP QAPP. Data Quality Assessment:

Water Segment: Arroyo Paredon

**Pollutant:** Toxicity

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.6 of the Listing Policy. Under section 3.6 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this

pollutant. Two measurements exceed the water quality objective.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of

the Policy.

3. Two of 2 samples exceeded the water quality objective and this exceeds

the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a

pollutant contributes to or causes the problem.

Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: RA - Rare & Endangered Species, SP - Fish Spawning, WA - Warm

Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective shall be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.

Survival of aquatic life in surface waters subjected to a waste discharge

or other controllable water quality conditions, shall not be less than that for the same water body in areas unaffected by the waste discharge or, when necessary, for other control water that is consistent with the requirements for "experimental water" as described in Standard Methods

for the Examination of Water and Wastewater, latest edition.

Data Used to Assess Water

Quality:

Two out of two samples displayed significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria met). Both toxic samples were tested using the 7-day Ceriodaphnia dubia test (SWAMP, 2004). Please note QA qualifier under

Data Quality Assessment section below.

Spatial Representation: Both samples were collected from the same station (Arroyo Paredon)

Paredon Creek at Via Real.

Samples were collected December 3, 2001 and March 19, 2002. Toxicity Temporal Representation:

in the survival endpoint was detected in both these samples.

Environmental Conditions: Arroyo Paredon is in the South Coast Hydrologic Unit.

Data Quality Assessment: SWAMP; QA qualifier indicated for the sample collected March 19, 2002

reported "minor deviations in water quality parameters".

Water Segment: Bell Creek (Santa Barbara Co)

**Pollutant:** Nitrate as Nitrate (NO3)

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Fifteen of 17 samples exceeded the MCL and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CM - Commercial and Sport Fishing (CA), MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title

excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3). In Table 3-2, the MCL for Nitrate (as

NO3) in Domestic or Municipal Supply is 45 mg/L.

Data Used to Assess Water

Quality:

Fifteen out of 17 samples exceeded the water quality objective for nitrate

(as NO3) for municipal and domestic supply (SWAMP, 2004).

Spatial Representation: Samples were collected from one site.

Temporal Representation: Samples were collected from January 2001 through March 2002.

**Environmental Conditions:** 

The water body is located in the South Coast hydrologic unit, Arguello hydrologic area, Arguello hydrologic subarea. The monitoring site is located at Bell Creek on Bacara Resort Access Road (315BEL).

SWAMP QAPP. Data Quality Assessment:

Water Segment: Bradley Canyon Creek

**Pollutant:** Ammonia (Unionized) - Toxin

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three of 7 samples exceeded the criterion for unionized ammonia and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region

3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4).

Data Used to Assess Water Three out of se

Quality:

Three out of seven samples exceeded the general water quality objective

(CCAMP, 2004; SWAMP, 2004).

Spatial Representation: Data were collected at site 312BCF on Bradley Canyon Creek, in Santa

Barbara County.

Temporal Representation: Samples were collected from April 2000 to December 2000.

**Environmental Conditions:** 

Water body is located in the Santa Maria Hydrologic Unit. The site is identified as Bradley Canyon Diversion Channel at Foxen Canyon Road

(312BCF).

CCAMP, SWAMP QAPP. Data Quality Assessment:

QA/QC Equivalent: Samples were taken according to CCAMP protocols.

Water Segment: Bradley Canyon Creek

**Pollutant:** Nitrate as Nitrate (NO3)

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this

pollutant. Four measurements exceed the water quality objective.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of

the Policy.

3. Four of 9 samples exceeded the MCL water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

SWRCB Staff Recommendation:

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

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title

excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as

NO3) in Domestic or Municipal Supply is 45 mg/L).

Data Used to Assess Water

Quality:

Four out of nine samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004; SWAMP,

2004).

Spatial Representation: Samples were collected from 2 sites. All samples with exceedances were

collected from one site (312BCF).

Temporal Representation: Samples were collected from March 2000 to December 2000.

**Environmental Conditions:** 

The water body is located in the Santa Maria hydrologic unit, Guadalupe hydrologic subarea. The site is located at Bradley Canyon Diversion Channel (312BCF) and Bradley Canyon Creek at Orcut-Garey Road

(312BCG).

Data Quality Assessment: CCAMP, SWAMP QAPP.

Water Segment: Bradley Channel

**Pollutant:** Nitrate as Nitrate (NO3)

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three of 15 samples exceeded the MCL and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in Water Quality Criterion: water Shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title

excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as

NO3) in Domestic or Municipal Supply is 45 mg/L).

Data Used to Assess Water

Quality:

Three out of 15 samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004; SWAMP,

2004).

Spatial Representation: Samples were collected from one site.

Temporal Representation: Samples were collected from January 2000 to February 2001.

Environmental Conditions:

The water body is located in the Santa Maria hydrologic unit, Guadalupe hydrologic subarea. The site is located at Bradley Channel upstream of ponds (312BCU).

CCAMP, SWAMP QAPP. Data Quality Assessment:

Water Segment: Canada De La Gaviota

Pollutant: Boron

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Fifteen of 32 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Region 3 Basin Plan, Section II.A.2 Objectives for all inland surface waters, enclosed bay, and estuaries, page III-5). In Table 3-4 of the Basin Plan (page III-9), the maximum concentration for boron for irrigation supply is 0.75 mg/L.

Data Used to Assess Water

Quality:

Fifteen out of 32 samples exceeded the water quality objective for agricultural water use/irrigation supply for boron (CCAMP, 2004;

SWAMP, 2004).

Spatial Representation: Samples were collected from two sites. Exceedances were detected in

samples collected from both sites.

Temporal Representation: Samples were collected from January 2001 to July 2002.

Environmental Conditions: This water body is located in the South Coast hydrologic unit, Arguello

hydrologic area, Arguello hydrologic subarea. The monitoring sites are located at Canada de la Gaviota at State Park Entrance (315GAV) and

Canada de la Gaviota at Highway 1 (315GAI).

Data Quality Assessment: CCAMP and SWAMP QAPP.

Carneros Creek **Water Segment:** 

Pollutant: Ammonia (Unionized) - Toxin

Decision: List

This pollutant is being considered for placement on the section 303(d) list Weight of Evidence:

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this

pollutant. Three samples exceeded the water quality objective.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of

the Policy.

3. Three of 9 samples exceeded the water quality objective and this exceeds

the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, MI - Fish Migration, RA - Rare &

Endangered Species, SP - Fish Spawning, WA - Warm Freshwater

Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/

The discharge of wastes shall not cause concentrations of unionized Water Quality Criterion: ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region

3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4)

Data Used to Assess Water

Quality:

Three out of 9 samples exceeded the general water quality objective

(CCAMP, 2004; SWAMP, 2004).

Spatial Representation: Samples were collected from one site. Temporal Representation: Samples were collected from March 1999 to March 2000.

Water body is located in the Bolsa Nueva hydrologic unit. The site is Carneros Creek in Los Lomas at Blohm Road (306CAR). **Environmental Conditions:** 

CCAMP, SWAMP QAPP. Data Quality Assessment:

Water Segment: Casmalia Canyon Creek

**Pollutant:** Sedimentation/Siltation

**Decision:** List

Weight of Evidence: The data and information in the administrative record supports this change in

the original listing recommendation. There was a misunderstanding of the applicable water body recommended for listing by staff. This change will

correct that mistake.

The correction is requested for San Antonio Creek (South Coast Watershed) Sedimentation/Siltation. This water body was incorrectly assigned to a sedimentation/siltation problem. The correct water bodies are Shuman Canyon Creek and Casmalia Canyon Creek. The 303(d) List Table should be revised to remove San Antonio Creek (South Coast Watershed) for Sedimentation/Siltation and add Casmalia Canyon Creek (4.5 miles) and Shuman Canyon Creek (3.0 miles) (313004) for Sedimentation/Siltation. The original listing recommendation originated with Regional Board staff, however

there was a misunderstanding of the applicable water body recommended for

listing by staff. This change will correct that mistake.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that a water body was incorrectly assigned to a sedimentation/siltation problem and that the listing should be revised with this water body and the

listing should be changed as presented.

#### Lines of Evidence:

Line of Evidence Pollutant-Water

Beneficial Use AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), MU -

Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Data Used to Assess Water

Quality:

The correction is requested for San Antonio Creek (South Coast Watershed) Sedimentation/Siltation. This water body was incorrectly assigned to a sedimentation/siltation problem. The correct water bodies

are Shuman Canyon Creek and Casmalia Canyon Creek.

The 303(d) List Table should be revised to remove San Antonio Creek (South Coast Watershed) for Sedimentation/Siltation and add Casmalia Canyon Creek (4.5 miles) and Shuman Canyon Creek (3.0 miles)

(313004) for Sedimentation/Siltation.

The original listing recommendation originated with Regional Board staff, however there was a misunderstanding of the applicable water body recommended for listing by staff. This change will correct that mistake.

Spatial Representation: The sampling site was 4.5 miles.

Temporal Representation: Correction Submittal on 6/14/2004.

Water Segment: Chorro Creek

Pollutant: Oxygen, Dissolved

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.2 of the Listing Policy. Under section 3.2 a single line of

evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Five of 10 samples exceeded the COLD dissolved oxygen water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.

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

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

#### Lines of Evidence:

Numeric Line of Evidence Adverse Biological Responses

Beneficial Use: AG - Agricultural Supply, BI - Preserva.of Bio.Hab.of Spec.Signif., CM -

Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ COLD dissortation:

COLD dissolved oxygen water quality objective of 7.0 mg/l.

Data Used to Assess Water

Quality:

Regional Board staff is proposing that Chorro Creek (downstream of Chorro Creek Road) be listed as impaired for dissolved oxygen. The

impairment is evidenced by depressed levels of dissolved oxygen measured during pre-dawn and 24-hour sampling periods.

Continuous depressed levels of dissolved oxygen (< 7.0 mg/l) were found in Chorro Creek at TWB (approximately between 12a.m-8a.m.) during three 24-hour hourly sampling periods in July, August and September 2003. Continuous depressed levels of oxygen were also found between 5 p.m. and 7 a.m. at site added in September 2003 upstream of TWB (usTWB) (CCRWQCB, 2004o).

Dissolved oxygen levels were within the COLD water quality objective at CAN during three 24-hour hourly sampling periods in July, August and September 2003 (CCAMP, 2004). Dissolved oxygen levels just under the COLD water quality objective (6.81-6.99 mg/l) were found during one of three sampling periods at an upstream site (CHO) in August 2003. Regional Board staff does not consider the segment upstream of CAN (and CHO) as impaired.

Regional Board staff considers the segment between usTWB and TWB (downstream of Chorro Creek Road) as impaired for dissolved oxygen. The level of impairment between CAN and usTWB is unknown. Five out of 10 samples exceeded the COLD dissolved oxygen water quality objective.

Spatial Representation: Chorro Creek (Calwater watershed no. 31022012) downstream of Chorro

Creek Road. Measurements were taken in Chorro Creek at four locations

(CHO, CAN, usTWB, and TWB).

Temporal Representation: Hourly measurements were taken in three 24-hour hourly sampling

periods in July, August, and September 2003.

Environmental Conditions: Hourly dissolved oxygen measurements were taken using a recording

dissolved oxygen meter.

Data Quality Assessment: Dissolved oxygen measurements in Chorro Creek were taken according

to CCAMP 24-hour hourly recording meter sampling protocols. Morro Bay

Volunteer Monitoring Program.

Water Segment: Cuyama River

Pollutant: Boron

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this

pollutant. Six samples exceed the water quality objective.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Six of 35 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Region 3 Basin Plan, Section II.A.2 Objectives for all inland surface waters, enclosed bay, and estuaries, page III-5). In Table 3-4 of the Basin Plan (page III-9), the maximum concentration for boron for irrigation supply is 0.75 mg/L.

Data Used to Assess Water

Quality:

Six out of 35 samples exceeded the water quality objective for agricultural water use/ irrigation supply for boron (CCAMP, 2004;

SWAMP, 2004).

Spatial Representation:

Samples were collected from four sites. Exceedances were detected

from samples collected at one station (312CCC).

Temporal Representation:

Samples were collected from January 2000 to April 2001.

**Environmental Conditions:** 

The water body is located in the Santa Maria hydrologic unit, Cuyama Valley hydrologic area, Cuyama Valley hydrologic subarea. The monitoring sites are located at Cuyama River at Highway 33 (312CAV), Cuyama River above Lockwood turnoff (312CUL), Cuyama River

downstream Buckhorn Road (312CUY), and Cuyama River downstream

Cottonwood Canyon (312CCC).

Data Quality Assessment:

CCAMP, SWAMP QAPP

Water Segment: Franklin Creek

**Pollutant:** Nitrate as Nitrate (NO3)

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Twenty-six of 28 samples exceeded the MCL and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in Water Quality Criterion: water Shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title

excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as

NO3) in Domestic or Municipal Supply is 45 mg/L).

Data Used to Assess Water

Quality:

Twenty-six out of 28 samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004.

SWAMP, 2004).

Spatial Representation: Samples collected from one site.

Temporal Representation: Samples were collected from January 2001 to March 2003.

Environmental Conditions:

Water body is located in the South Coast hydrologic unit, Carpinteria hydrologic subarea. The site location is Franklin Creek at Carpinteria Ave (315FRC).

CCAMP, SWAMP QAPP. Data Quality Assessment:

Water Segment: Gabilan Creek

**Pollutant:** Nitrate as Nitrate (NO3)

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this

pollutant. Two measurements exceeded the water quality objective.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of

the Policy.

3. Two of the 6 samples exceeded the MCL and this exceeds the allowable

frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title

excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as

NO3) in Domestic or Municipal Supply is 45 mg/L.).

Data Used to Assess Water

Quality:

There were 6 total samples taken by CCAMP staff. Out of the 6 samples, 2 exceeded the water quality objective for nitrate (as NO3) for municipal

and domestic supply (CCAMP, 2004; SWAMP, 2004).

Spatial Representation: Samples were collected from two sites.

Temporal Representation: Samples were collected from July 1999 to February 2000.

**Environmental Conditions:** 

The water body is located in the Salinas hydrologic unit, Gabilan Range hydrologic subarea. The sites are Gabilan Creek at Independence Road and East Boranda Road (309GAB), "City of Salinas Urban GC1-M."

CCAMP, SWAMP QAPP. Data Quality Assessment:

Water Segment: Glen Annie Canyon

**Pollutant:** Nitrate as Nitrate (NO3)

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Twelve of 15 samples exceeded the MCL and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title

excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as

NO3) in Domestic or Municipal Supply is 45 mg/L).

Data Used to Assess Water

Quality:

Twelve out of 15 samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004; SWAMP,

2004).

Spatial Representation: Samples collected from one site.

Temporal Representation: Samples were collected from February 2001 to March 2002.

Environmental Conditions:

The water body is located in the South Coast hydrologic area, Goleta hydrologic subarea. The site is located at Glenn Annie upstream Hollister Road (Site I.D. #315ANN).

CCAMP, SWAMP QAPP. Data Quality Assessment:

Water Segment: Llagas Creek

**Pollutant:** Nitrate as Nitrate (NO3)

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Thirty-three of 69 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a

pollutant contributes to or causes the problem.

## Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title

excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as

NO3) in Domestic or Municipal Supply is 45 mg/L).

Data Used to Assess Water

Quality:

Thirty-three out of 69 samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004;

SWAMP, 2004).

Spatial Representation: Samples were collected from six sites. Exceedances were detected in

samples collected from three of the six sites.

Temporal Representation: Samples were collected from December 1997 to January 1999.

Environmental Conditions: This water body was listed for nutrients in 2002 but not for nitrate

specifically.

The water body is located in the Pajaro River hydrologic unit, South Santa Clara Valley hydrologic area, South Santa Clara Valley hydrologic

subarea. The sites are located at Llagas Creek at Holsclaw and Leavesley Roads (305HOL), Llagas Creek at Bloomfield Avenue

(305LLA), Llagas Creek at Luchessa Avenue/Southside Drive (305LUC), Llagas Creek at Monterey Road (305MON) Llagas Creek at Oak Glen Avenue (305OAK), Llagas Creek at Buena Vista Avenue (305VIS).

Data Quality Assessment: CCAMP, SWAMP QAPP.

Water Segment: Main Street Canal

**Pollutant:** Ammonia (Unionized) - Toxin

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Ten of 11 samples exceeded the unionized ammonia numeric water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4)

Data Used to Assess Water

Quality:

Ten out of 11 samples exceeded the general water quality objective

(CCAMP, 2004; SWAMP, 2004).

Spatial Representation: Data were collected at site 312MSD on Main Street Canal, in Santa

Barbara County.

Temporal Representation: Samples were collected from February 2000 to January 2001.

Environmental Conditions: Water body is located on the Santa Maria hydrologic unit, Guadalupe

hydrologic subarea. The site is called Main Street Canal upstream Ray

Road at Hwy 166 (Site #312MSD).

In 2000, this site was an open agriculture ditch downstream of the city stormwater drain. This year (2005) the channel is being reconstructed to flow underground through pipes to a location approximately 100 feet

downstream of this monitoring site.

Data Quality Assessment: CCAMP, SWAMP QAPP.

QA/QC Equivalent: Samples were taken according to CCAMP protocols.

Water Segment: Moro Cojo Slough

**Pollutant:** Ammonia (Unionized) - Toxin

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this

pollutant. Several samples exceed the water quality objective.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of

the Policy.

3. Four of 18 samples exceeded the water quality objective and this exceeds

the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a

pollutant contributes to or causes the problem.

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, ES - Estuarine Habitat, RA - Rare &

Endangered Species, SP - Fish Spawning, WA - Warm Freshwater

Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region

3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4)

Data Used to Assess Water Four out of 18 samples exceeded the general water quality objective

Quality: (CCAMP, 2004; SWAMP, 2004).

Spatial Representation: Samples were collected from two sites. All exceedances were detected in

samples collected from one site (Site 306MOR). This site is tidally influenced and flow was observed moving into the slough out of the harbor (instead of flowing out to the harbor) on numerous occasions.

Temporal Representation: Samples were collected from March 1999 to March 2000.

Environmental Conditions: Water body is located in the Bolsa Nueva (Elkhorn Slough) Hydrologic

Unit, Bolsa Nueva hydrologic subarea, Moro Cojo Slough planning watershed. The sites are located at Moro Cojo Slough at Moss Landing Harbor (306MCM) and Moro Cojo Slough at Highway 1 (306MOR).

Note: in the Region 3 Basin Plan, Moro Cojo Slough is listed under the Salinas Hydrologic Unit (309). The Region 3 CCAMP/SWAMP Monitoring classifies this water body under the Bolsa Nueva hydrologic unit (306) to

be in agreement with the CalWater designation.

Data Quality Assessment: CCAMP, SWAMP QAPP.

Morro Bay **Water Segment:** 

Pollutant: Oxygen, Dissolved

Decision: List

This pollutant is being considered for placement on the section 303(d) list Weight of Evidence:

under section 3.2 of the Listing Policy. Under section 3.2 a single line of

evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two hundred and thirty-one of 283 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.

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

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

#### Lines of Evidence:

Numeric Line of Evidence Adverse Biological Responses Beneficial Use: CO - Cold Freshwater Habitat

Matrix: -N/A

Water Quality Objective/ Water Quality Criterion:

MAR = Marine Habitat

Evaluation Guideline: COLD Dissolved Oxygen = 7.0 mg/L.

Data Used to Assess Water

Quality:

Regional Board staff is proposing that Morro Bay be listed as impaired for dissolved oxygen. The impairment is evidenced by depressed levels of dissolved oxygen measured during pre-dawn and 24-hour sampling periods. Two Hundred and thirty one data points (of a total of 283 data points) collected between 1997 and 2002 fell below the water quality

objective of 7.0 mg/L (CCRWQCB, 2004o). Depressed oxygen levels were found at all sampling locations except for EEL. There were 231 out of 283 samples that exceeded the COLD dissolved oxygen water quality

objective.

Spatial Representation: Morro Bay Estuary (Calwater watershed no. 31023012), San Luis Obispo

County. Samples were collected at 8 locations throughout the bay: ATP,

SPM, Lo2, PSP, EEL, Ch1, CSI, and SHI.

Temporal Representation: Single measurements were taken in the Morro Bay estuary using a hand-

held meter. Measurements were taken during pre-dawn conditions from

4/17/1997 through 12/132002.

Environmental Conditions: Samples were primarily taken during pre-dawn conditions, when

dissolved oxygen levels are expected to be lowest.

QA/QC Equivalent: Samples were taken according to the Morro Bay Volunteer Monitoring

Program protocols for pre-dawn sampling in the Morro Bay National

Estuary Programs Quality Assurance Program Plan.

The Morro Bay Volunteer Monitoring Program staff has monthly correspondence with volunteers regarding data review, meter operation, and safety. Volunteer monitors collect dissolved oxygen data according to the Morro Bay National Estuary Programs Quality Assurance Program

Plan.

Water Segment: Natividad Creek

**Pollutant:** Nitrate as Nitrate (NO3)

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this

pollutant. Three samples exceed the water quality objective.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three of 5 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title

excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3). In Table 3-2, the MCL for Nitrate (as

NO3) in Domestic or Municipal Supply is 45 mg/L.

Data Used to Assess Water

Quality:

Three out of five samples exceeded the water quality objective for nitrate

(as NO3) for municipal and domestic supply (CCAMP, 2004).

Spatial Representation: Samples were collected from one site.

Temporal Representation: Samples were collected January 2000 to May 2000. This site is a City of

Salinas Storm water permit monitoring site and therefore it is monitored

during storm water events.

The water body is located in the Salinas hydrologic unit, Gabilan range hydrologic area, Gabilan range hydrologic subarea. NC1\_M is identified **Environmental Conditions:** 

as "City of Salinas Urban NC1\_M".

City of Salinas MS4 Permit Monitoring. CCAMP data. Data Quality Assessment:

Water Segment: Old Salinas River Estuary

**Pollutant:** Ammonia (Unionized) - Toxin

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this

pollutant. Six measurements exceed the water quality objective.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Six of 48 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CM - Commercial and Sport Fishing (CA), WA - Warm Freshwater

Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4).

Data Used to Assess Water

Quality:

Six out of 48 samples exceeded the general water quality objective

(SWAMP, 2004).

Spatial Representation: Samples were collected from two sites. Exceedances were detected in

water samples collected from one (site ID #309OLD) of the two sites.

Temporal Representation: Samples were collected from March 1999 to March 2003.

Environmental Conditions:

The water body is located in the Salinas hydrologic unit. The sites are located at Old Salinas River at Monterey Dunes Way (309OLD) and Old Salinas River at Potrero Road (309POT).

SWAMP QAPP. Data Quality Assessment:

Water Segment: Orcutt Creek

**Pollutant:** Ammonia (Unionized) - Toxin

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. A sufficient number of samples exceed the water quality objective.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Fifteen of 59 total water samples exceeded the water quality objective of 0.025 mg/l and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -

Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal &

Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation,

RA - Rare & Endangered Species, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4).

Data Used to Assess Water Quality:

From new listing proposal: Regional Board staff is proposing that multiple water bodies (including Orcutt Solomon Creek) within the Santa Maria watershed be listed for unionized ammonia. The impairment is evidenced by levels of unionized ammonia greater than the general numeric water quality objective of 0.025 mg/l. The Regional Board assessed CCAMP data and results are as follows for two sites on Orcutt Solomon Creek: 3 of 11 and 5 of 12 data points exceed the criterion.

See CCAMP data for further information (CCAMP, 2004). This constituent was not included in the last (2002) data evaluation because data had not been processed in time to meet the 2002 deadline.

Spatial Representation: Data were collected at sites 312ORB and 312ORI on Orcutt Solomon

Creek, in Santa Barbara County.

Temporal Representation: Unknown - see CCAMP data.

QA/QC Equivalent: Samples were taken according to CCAMP protocols.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -

Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal &

Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation,

RA - Rare & Endangered Species, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4).

Data Used to Assess Water

Quality:

Seven out of 36 samples exceeded the water quality objective (SWAMP,

2004).

Spatial Representation:

Samples were collected from three sites. Exceedances were detected in

water samples collected from all sites.

Temporal Representation:

Samples were collected from January 2000 to April 2001.

Environmental Conditions:

The water body is located in the Santa Maria hydrologic unit, Guadalupe hydrologic subarea, Orcutt Creek planning watershed. Monitoring sites are located at Orcutt Solomon Creek at Black Road (#312ORB), Orcutt Solomon Creek upstream Santa Maria River (#312ORC) and Orcutt

Solomon Creek at Highway 1 (312ORI).

Data Quality Assessment: SWAMP QAPP.

Water Segment: Orcutt Creek

**Pollutant:** Chlorpyrifos

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. A sufficient number of samples exceed the water quality objective.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Four of 4 samples exceeded the Basin Plan general water quality objective; 2 of 2 samples were in exceedance of the aquatic life criteria and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -

Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal &

Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation,

RA - Rare & Endangered Species, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator

organisms, analyses of species diversity, population density, growth

anomalies, toxicity bioassays of appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

Evaluation Guideline:

CDFG Hazardous Assessment Criteria for Aquatic Life: 4-day average = 0.014 ppb, 1-hour day average = 0.025 ppb.

Data Used to Assess Water Quality:

Water was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) on four separate occasions (June 2002, September 2002, March 2003, and May 2003) (SWAMP, 2004). Water was toxic at both stations in September 2002 and May 2003 (4 exceedances of 4 measurements). Analysis of chlorpyrifos in water showed that on all occasions when water toxicity was observed, concentrations of chlorpyrifos exceeded the LC 50 for this pesticide for toxicity to Ceriodaphnia dubia. Toxicity Identification Evaluations of water samples from Orcutt Creek and the Santa Maria River showed toxicity to C. dubia was due to chlorpyrifos. At the station on Orcutt Creek, 2 of 2 samples were in exceedance of the aquatic life criteria.

Spatial Representation:

Samples were collected at one station on Orcutt Creek (a tributary to the Santa Maria River).

Temporal Representation:

Samples were collected on 9/3/2002 and 5/28/2003.

QA/QC Equivalent:

Quality assurance and quality control procedures were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

# Numeric Line of Evidence

Pollutant-Sediment

Beneficial Use:

AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WI - Wildlife Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or

aquatic life.

Data Used to Assess Water

Quality:

Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) on two separate occasions (June 2002 and May 2003).

Sediment was toxic at both stations in both samples (SWAMP, 2004). Analysis of chlorpyrifos in sediment porewater showed that on all occasions when water toxicity was observed, concentrations of chlorpyrifos exceeded the LC50 for this pesticide to the amphipod Hyalella azteca. Toxicity Identification Evaluations of sediment samples from Orcutt Creek and the Santa Maria River showed toxicity was due to a combination of chlorpyrifos and other pesticides, likely pyrethroid pesticides (refer to attached excel spreadsheet file). Sediment bulkphase chemical analyses showed elevated concentrations of chlorpyrifos.

Spatial Representation:

Samples were collected at one station on Orcutt Creek (a tributary to the

Santa Maria River).

Temporal Representation:

Samples were collected in 5/28/2003.

QA/QC Equivalent:

Quality assurance and quality control procedures for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and

are the labs participating in the SWAMP program.

Water Segment: Orcutt Creek

**Pollutant:** DDT

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Three lines of evidence pertain to the pollutant in water and three pertain to the pollutant in sediment. A sufficient number of samples exceed the Human Health criteria for the different types of degradation products of DDT.

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

This conclusion is based on the staff findings that:

- 1. The water quality guideline used complies with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. Samples were taken in 2002 and 2003. Two of 2 samples (2002 and 2003) exceeded the total DDT, 2 of 2 samples exceeded 4,4' DDD, and 2 of 2 samples exceeded the 4,4' DDE Human Health (water consumption) criteria and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Even though sediment toxicity was found in 2003 the measurements of these chemicals in the sediment did not exceed the sediment guideline. 5.Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

# SWRCB Staff Recommendation:

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

## Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -

Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal &

Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation,

RA - Rare & Endangered Species, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: General WQOs:

All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of

appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or

aquatic life.

CTR criteria for:

Freshwater acute = 1.1 ppb for 4,4'-DDT and DDTs (total). Human Health (water consumption) = 0.00059 ppb for 4,4'-DDT. Human Health (water consumption) = 0.0059 ppb for DDTs (total).

Data Used to Assess Water

Quality:

Samples were collected on Orcutt Creek on two occasions: in 2002 and 2003 (SWAMP, 2004). Both measurements for total DDTs and 4,4'-DDT were below freshwater acute criteria, however both measurements exceeded human health criteria for water consumption for both 4,4'-DDT

and DDTs (total).

Spatial Representation: Samples were collected at one station on Orcutt Creek (a tributary to the

Santa Maria River).

Temporal Representation: Samples were collected on 9/3/2002 and 5/28/2003.

QA/QC Equivalent: Quality assurance and quality control procedures were identical to those

used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in

the SWAMP program.

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -

Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal &

Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation,

RA - Rare & Endangered Species, WI - Wildlife Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

General WQOs:

All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

Freshwater Sediment Criteria (Policy):

DDT(sum) = 62.9 ppbDDTs(total) = 572

Data Used to Assess Water Quality:

Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) in 2002 and 2003 (SWAMP, 2004). In the Orcutt Creek sample, the sediment criterion for DDT (sum) was exceeded (62.9 ppb) in the 2003 sample, but not in 2002 sample. The DDTs (total) criterion (572

ppb) was not exceeded on either occasion.

Spatial Representation: Samples were collected at one station on Orcutt Creek (a tributary to the

Santa Maria River).

Samples were collected on 6/28/2002 and 5/28/2003. Temporal Representation:

QA/QC Equivalent: Quality assurance and quality control procedures for the primary study

were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and

are the labs participating in the SWAMP program.

Numeric Line of Evidence

Pollutant-Water

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -

Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal &

Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation,

RA - Rare & Endangered Species, WI - Wildlife Habitat

Water Matrix:

Water Quality Objective/ Water Quality Criterion:

General WQOs:

All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of

appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or

aquatic life.

CTR criteria for:

Human Health (water consumption) = 0.00083 ppb for 4,4'-DDD.

Data Used to Assess Water

Quality:

Samples were collected on Orcutt Creek on two occasions: in 2002 and 2003 (SWAMP, 2004). Both measurements for 4,4'-DDD exceeded the

human health criteria for water consumption (0.00083 ppb).

Samples were collected at one station on Orcutt Creek (a tributary to the Spatial Representation:

Santa Maria River).

Temporal Representation:

Samples were collected on 9/3/2002 and 5/28/2003.

QA/QC Equivalent:

Quality assurance and quality control procedures were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in

the SWAMP program.

## Numeric Line of Evidence

Pollutant-Sediment

Beneficial Use:

AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation,

RA - Rare & Endangered Species, WI - Wildlife Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

General WQOs:

All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of

appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or

aquatic life.

Freshwater Sediment Criteria (Policy):

DDD(sum) = 28.0 ppb.

Data Used to Assess Water

Quality:

Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) in 2002 and 2003 (SWAMP, 2004). In the Orcutt Creek sample, the sediment criterion for DDD (sum) was not exceeded on

either occasion.

Spatial Representation: Samples were collected at one station on Orcutt Creek (a tributary to the

Santa Maria River).

Samples were collected on 6/28/2002 and 5/28/2003. Temporal Representation:

QA/QC Equivalent:

Quality assurance and quality control procedures for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and

are the labs participating in the SWAMP program.

Numeric Line of Evidence

Pollutant-Water

Beneficial Use:

AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WI - Wildlife Habitat

Matrix:

Water

Water Quality Objective/ Water Quality Criterion: General WQOs:

All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

CTR criteria for:

Human Health (water consumption) = 0.00059 ppb for 4,4'-DDE.

Data Used to Assess Water

Quality:

Samples were collected on Orcutt Creek on two occasions: in 2002 and 2003 (SWAMP, 2004). Both measurements for 4,4'-DDE exceeded the human health criteria for water consumption (0,00059 ppb).

Spatial Representation:

Samples were collected at one station on Orcutt Creek (a tributary to the

Santa Maria River).

Temporal Representation:

Samples were collected on 9/3/2002 and 5/28/2003.

QA/QC Equivalent:

Quality assurance and quality control procedures were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Numeric Line of Evidence

Pollutant-Sediment

Beneficial Use:

AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WI - Wildlife Habitat

Matrix:

Sediment

Water Quality Objective/ Water Quality Criterion: General WQOs:

All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

Freshwater Sediment Criteria:

DDE(sum) = 31.3 ppb

Data Used to Assess Water

Quality:

Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) in 2002 and 2003 (SWAMP, 2004). In the Orcutt Creek sample, the sediment criterion for DDE (sum) was exceeded in 2003, but

not in 2002.

Spatial Representation: Samples were collected at one station on Orcutt Creek (a tributary to the

Santa Maria River).

Temporal Representation: Samples were collected on 6/28/2002 and 5/28/2003.

QA/QC Equivalent: Quality assurance and quality control procedures for the primary study

were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and

are the labs participating in the SWAMP program.

Water Segment: Orcutt Creek

**Pollutant:** Dieldrin

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. A sufficient number of samples exceed the CTR Human Health

criteria.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of 2 samples exceeded the CTR Human Heath criteria and this exceeds the allowable frequency listed in Table 3.1. Sediment samples were taken but dieldrin results were below the detection limits.

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

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

## Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -

Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal &

Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation,

RA - Rare & Endangered Species, WI - Wildlife Habitat

Matrix: Sediment

Water Quality Objective/ General WQOs:

Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations

which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective

will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

Freshwater Sediment criterion: max Dieldrin = 6.18 ppm.

Data Used to Assess Water

Sediment was sampled at Orcutt Creek (ORC) in May 2003 and the dieldrin level was below the detection limit (SWAMP, 2004).

Quality:

The sample was collected at one station on Orcutt Creek (a tributary to

the Santa Maria River).

Temporal Representation:

Spatial Representation:

One sample was collected on 5/28/2003.

QA/QC Equivalent:

Quality assurance and quality control procedures for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

## Numeric Line of Evidence

## Pollutant-Water

General WQOs:

Beneficial Use:

AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WI - Wildlife Habitat

Matrix:

Water

Water Quality Objective/ Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

CTR Human Health Criterion for consumption of Water & Organisms = 0.00014 ppb.

Data Used to Assess Water Quality:

Samples were collected on Orcutt Creek in September 2002 and May 2003 (SWAMP, 2004). Two of 2 samples were in exceedance of the CTR Human Health criterion for water consumption.

Spatial Representation:

Samples were collected at one station on Orcutt Creek (a tributary to the

Santa Maria River).

Temporal Representation:

Samples were collected on 9/3/2002 and 5/28/2003.

QA/QC Equivalent:

Quality assurance and quality control procedures were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Water Segment: Oso Flaco Creek

**Pollutant:** Ammonia (Unionized) - Toxin

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Nine of 12 samples exceeded the water quality objective of 0.025 mg/l and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, BI - Preserva.of Bio.Hab.of Spec.Signif., CM -

Commercial and Sport Fishing (CA), FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4).

Data Used to Assess Water Le

Quality:

Levels of unionized ammonia greater than the general numeric water quality objective of 0.025 mg/l (CCAMP, 2004; SWAMP, 2004). Nine of

12 data points exceed the water quality objective.

Spatial Representation: Data were collected at site 3120FC on Oso Flaco Creek, in San Luis

Obispo County.

Temporal Representation: Samples were collected from February 2000 to January 2001.

Environmental Conditions: Water body is located in the Santa Maria hydrologic unit, Guadalupe

hydrologic subarea. Monitoring site is located at Oso Flaco Creek at Oso

Flaco Lake Road (#3120FC).

Data Quality Assessment: CCAMP, SWAMP QAPP.

Oso Flaco Lake **Water Segment:** 

Pollutant: Dieldrin

Decision: List

This pollutant is being considered for placement on the section 303(d) list Weight of Evidence:

under section 3.5 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three out of 3 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

#### Lines of Evidence:

Pollutant-Tissue Numeric Line of Evidence

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion:

Central Coast RWQCB Basin Plan: No individual pesticide or

combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations

found in bottom sediments or aquatic life.

Evaluation Guideline: 2 ng/g (OEHHA Screening Value) (Brodberg & Pollock, 1999).

Data Used to Assess Water

Quality:

Three out of 3 samples exceeded (TSMP, 2002). A total of 2 filet composite samples of bluegill and one filet composite of hitch were collected. Bluegill were collected from 1993. Hitch were collected 2001.

The guideline was exceeded in all samples.

Spatial Representation: One station located in lake at foot of Oso Flaco Road.

Temporal Representation: Samples were collected 1993 and 2001. Data Quality Assessment:

Toxic Substances Monitoring Program 1992-93 Data Report. Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

and Game.

Water Segment: Pajaro River

Pollutant: Boron

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this

pollutant. Most samples exceed the water quality objective.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Ten of 16 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a

pollutant contributes to or causes the problem.

## Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Region 3 Basin Plan, Section II.A.2 Objectives for all inland surface waters, enclosed bay, and estuaries, page III-5). In Table 3-4 of the Basin Plan (page III-9), the maximum concentration for boron for irrigation supply is 0.75 mg/L.

Data Used to Assess Water Ten out of 16 samples exceeded the water quality objective for

Quality: agricultural water use/irrigation supply for boron (CCAMP, 2004;

SWAMP, 2004).

Spatial Representation: Samples were collected from one site.

Temporal Representation: Samples were collected from January 2001 through March 2002.

Environmental Conditions: The water body is located in Pajaro River Hydrologic Unit, Watsonville

Hydrologic Subarea. The monitoring site is located on the Pajaro River at

Thurwachter Bridge (305THU).

Data Quality Assessment: CCAMP, SWAMP QAPP.

Water Segment: Prefumo Creek

**Pollutant:** Nitrate as Nitrate (NO3)

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this

pollutant. Nearly all samples exceed the water quality objective.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of

the Policy.

3. Fourteen of 15 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a

pollutant contributes to or causes the problem.

## Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title

excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as

NO3) in Domestic or Municipal Supply is 45 mg/L).

Data Used to Assess Water

Quality:

Fourteen out of 15 samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004,

SWAMP, 2004).

Spatial Representation: Samples were collected from one site.

Temporal Representation: Samples were collected from January 2002 through March 2003.

**Environmental Conditions:** 

Water body is located in the Estero Bay hydrologic unit, Point Buchon hydrologic area, San Luis Obispo Creek hydrologic subarea. Monitoring site is located at Prefumo Creek Calle Joaquin (310PRE).

CCAMP, SWAMP QAPP. Data Quality Assessment:

Water Segment: Quail Creek

**Pollutant:** Nitrate as Nitrate (NO3)

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Four of 8 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title

excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as

NO3) in Domestic or Municipal Supply is 45 mg/L).

Data Used to Assess Water

Quality:

Four out of eight samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004; SWAMP,

2004).

Spatial Representation: Samples were collected from two sites. Exceedances were detected in

samples collected at one site (309QUA).

Temporal Representation: Samples were collected from February 1999 through February 2000.

Environmental Conditions: The water body is located in the Salinas Bay hydrologic unit, Chualar

hydrologic area, and Chualar hydrologic subarea. The monitoring sites area located at Quail Creek at Old Stage Road (309UQA) and Quail

Creek at Potter Road (309QUA).

Data Quality Assessment: CCAMP, SWAMP QAPP.

Water Segment: Rincon Creek

Pollutant: Boron

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Seven of 21 samples exceeded the boron water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

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

### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Region 3 Basin Plan, Section II.A.2 Objectives for all inland surface waters, enclosed bay, and estuaries, page III-5). In Table 3-4 of the Basin Plan (page III-9), the maximum concentration for boron for irrigation supply is 0.75 mg/L.

Data Used to Assess Water

Quality:

Seven out of 21 samples exceeded the water quality objective for agricultural water use/ irrigation supply for boron (CCAMP, 2004;

SWAMP, 2004).

Spatial Representation: Samples were collected from one site.

Temporal Representation: Samples were collected from January 2001 through July 2002.

Environmental Conditions: The water body is located in the South Coast hydrologic unit, South

Coast hydrologic area, Carpinteria hydrologic subarea. The monitoring site is located at Rincon Creek at Bates Road, upstream of Highway 101

(315RIN).

Data Quality Assessment: CCAMP, SWAMP QAPP.

Water Segment: Rincon Creek

**Pollutant:** Toxicity

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.6 of the Listing Policy. Under section 3.6 a toxicity single line

of evidence is can be used to assess listing status.

One line of evidence is available in the administrative record to assess this

pollutant. Two measurements exhibit toxicity.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of

the Policy.

3 Two of 2 samples dis

3. Two of 2 samples displayed significant toxicity in the survival endpoint using the 7-day Pimephales promelas test. This exceeded the narrative water quality objective and exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a

pollutant contributes to or causes the problem.

### Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: CO - Cold Freshwater Habitat, MI - Fish Migration, RA - Rare &

Endangered Species, SP - Fish Spawning, WA - Warm Freshwater

Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other

appropriate methods as specified by the Regional Board.

Survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality conditions, shall not be less than that for the same water body in areas unaffected by the waste discharge or, when necessary, for other control water that is consistent with the requirements for "experimental water" as described in Standard Methods for the Examination of Water and Wastewater, latest edition. As a minimum, compliance with this objective shall be evaluated with a 96-hour bioassay.

Data Used to Assess Water

Quality:

Two out of two samples displayed significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5% and is less than the evaluation threshold (both criteria are met). Both samples were tested using the 7-day Pimephales promelas test (SWAMP, 2004). Please note QA qualifier under Data Quality Assessment section below.

Spatial Representation:

Both samples were collected from the same station, Rincon Creek at

Bates Road.

Temporal Representation:

Samples were collected December 3, 2001 and March 19, 2002. Toxicity

in the survival endpoint was detected in both these samples.

**Environmental Conditions:** 

Rincon Creek is in the South Coast Hydrologic Unit.

Data Quality Assessment:

 $SWAMP; QA\ qualifier\ indicated\ for\ the\ sample\ collected\ March\ 19,\ 2002.$ 

This is reported as minor deviations in water quality parameters.

Water Segment: Salinas Reclamation Canal

**Pollutant:** Ammonia (Unionized) - Toxin

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Five of 14 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Re

ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4)

Data Used to Assess Water

Quality:

Five of 14 total samples collected by CCAMP staff exceeded the water

quality objective (CCAMP, 2004; SWAMP, 2004).

Spatial Representation: Samples were collected at site 309ALD by CCAMP staff. This water body

is located in the Salinas hydrologic unit, Chualar hydrologic subarea. The site is located at Salinas Reclamation Canal at Boranda Road (309ALD).

Temporal Representation: Samples were collected from February 1999 to February 2000.

Data Quality Assessment: CCAMP, SWAMP QAPP used to evaluate.

Water Segment: Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds

30910 and 30920)

**Pollutant:** Nitrate as Nitrate (NO3)

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Seventeen of 47 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

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

### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as

NO3) in Domestic or Municipal Supply is 45 mg/L).

Data Used to Assess Water

Quality:

Seventeen out of 47 samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004;

SWAMP, 2004).

Spatial Representation: Samples were collected from two sites. Exceedances were detected in

samples collected from both sites.

Temporal Representation: Samples were collected from February 1999 through March 2003.

Environmental Conditions: This water body is already listed for nutrients, but not for nitrate

specifically.

The water body is located in the Salinas hydrologic unit, and Lower Salinas Valley hydrologic area. The sampling sites are located at Salinas

River at Davis Road (309DAV), and Salinas River at Highway 1

(309SBR).

Data Quality Assessment: CCAMP, SWAMP QAPP.

Water Segment: Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds

30910 and 30920)

**Pollutant:** Toxaphene

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

replace the current pesticides listing for this water body.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of the 2 samples exceeded the NAS Guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Central Coast RWQCB Basin Plan: All waters shall be maintained free of

toxic substances in concentrations that are toxic to, or produce

detrimental physiological responses in human, plant, animal, or aquatic

life

Evaluation Guideline: 100 ng/g - NAS Guideline (whole fish) (NAS, 1972).

Data Used to Assess Water

Quality:

Two out of 2 samples exceeded (TSMP, 2002). One whole fish composite sample of hitch and of sucker was collected. Hitch was

collected in 1992 and suckers were collected in 1998. The guideline was

exceeded in both samples.

Spatial Representation: Two stations were sampled: about 1/2 mile downstream of the Blanco

Drain discharge to the Salinas River and at the Davis Road crossing.

Temporal Representation: Samples were collected in 1992 and 1998.

Data Quality Assessment:

Toxic Substances Monitoring Program 1992-93 Data Report. Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Water Segment: San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at

Hwy 135 to downstream at Railroad Bridge)

**Pollutant:** Ammonia as Nitrogen

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Seven of 52 samples exceeded the ammonia water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

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

### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, MI - Fish Migration, RA - Rare &

Endangered Species, SP - Fish Spawning, WA - Warm Freshwater

Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters,

3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4)

Data Used to Assess Water

Quality:

Seven out of 52 samples exceeded the general water quality objective

(CCAMP, 2004; SWAMP, 2004).

Spatial Representation: Samples were collected from four sites. Exceedances were detected in

samples collected from one (site #313SAI) of the four sites.

Temporal Representation: Samples were collected from January 2001 to March 2003.

Environmental Conditions: The water body is located in the San Antonio hydrologic unit, San

Antonio hydrologic subarea. Monitoring sites are located at San Antonio Creek at Rancho de las Flores Bridge and Highway 135 (313SAB), San Antonio Creek at Railroad Bridge, upstream of lagoon (313SAC), San Antonio Creek at San Antonio Road East (313SAE), and San Antonio

Creek at San Antonio Road West (313SAI).

Data Quality Assessment: CCAMP, SWAMP QAPP.

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at **Water Segment:** 

Hwy 135 to downstream at Railroad Bridge)

Pollutant: Nitrogen, Nitrite

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this

pollutant. Five measurements exceed the water quality objective.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Five of 52 samples exceeded the water quality objective and this exceeds

the allowable frequency listed in Table 3.1 of the Listing Policy.

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

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

Drinking Water MCL for nitrite = 1 mg/L (Title 22 Table 64431-A Primary

(inorganics) 64444A (organics)).

Data Used to Assess Water

Quality:

Five out of 52 samples exceeded the general water quality objective

(CCAMP, 2004; SWAMP, 2004).

Samples were collected from four sites. Exceedances were detected in Spatial Representation:

samples collected from one (site #313SAI) of the four sites.

Temporal Representation: Samples were collected from January 2001 to March 2003.

Environmental Conditions: The water body is located in the San Antonio hydrologic unit, San Antonio hydrologic subarea. Monitoring sites are located at San Antonio Creek at Rancho de las Flores Bridge and Highway 135 (313SAB), San Antonio Creek at Railroad Bridge, upstream of lagoon (313SAC), San Antonio Creek at San Antonio Road East (313SAE), and San Antonio Creek at San Antonio Road West (313SAI).

Data Quality Assessment:

CCAMP, SWAMP QAPP.

San Diego Creek **Water Segment:** 

Pollutant: Toxaphene

Decision: List

This pollutant is being considered for placement on the section 303(d) list Weight of Evidence:

under section 3.5 of the Listing Policy. Under section 3.5 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A sufficient number of samples exceed the 100 ng/g NAS Guideline for the protection of aquatic life from bioaccumulation of toxic substances. Under section 3.5 of the Listing Policy any water body segment where tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline shall be placed on the section 303(d) list.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Nine of 25 samples exceeded the NAS guideline for Toxaphene and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Santa Ana River Basin RWQCB Basin Plan: Toxic substances shall not Water Quality Criterion:

be discharged at levels that will bioaccumulate in aquatic resources to

levels which are harmful to human health.

Evaluation Guideline: 100 ng/g [NAS Guideline (whole fish)] (NAS, 1972). Data Used to Assess Water

Quality:

Nine out of 25 samples exceeded (TSMP, 2002). A total of 25 whole fish composite samples were collected: 19 red shiner, 4 fathead minnow, and 2 California killifish. Red shiner were collected from 1992-2001. Fathead minnow were collected in 2001-02. California killifish were collected in 1993. The guideline was exceeded in red shiner from 1992 through 1997.

Samples from 1998-2002 did not exceed the guideline.

Spatial Representation: Three stations were sampled: in the riffle 150 yards upstream from the

confluence of San Diego Creek and Peters Canyon Creek (Barranca Parkway), upstream of Michelson Drive, and in small ponds adjacent to

the Upper Newport Bay Ecological Reserve.

Temporal Representation: Samples were collected from 1992-2002.

Data Quality Assessment: Environmental Chemistry Quality Assurance and Data Report for the

Toxic Substances Monitoring Program, 1996-2000. Department of Fish and Game. Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of

Fish and Game.

Water Segment: San Luis Obispo Creek

**Pollutant:** Nitrate as Nitrate (NO3)

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Thirty-five of 66 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

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

### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title

excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as

NO3) in Domestic or Municipal Supply is 45 mg/L).

Data Used to Assess Water

Quality:

Thirty-five out of 66 samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004:

SWAMP. 2004).

Spatial Representation: Samples were collected from four sites. Exceedances were detected in

samples collected from two of the four sites (310SLB, 310SLV).

Temporal Representation: Samples were collected from April 2001 through March 2003.

Environmental Conditions: Water body is located in Estero Bay Hydrologic Unit, Point Buchon

hydrologic area, San Luis Obispo Creek Hydrologic Subarea. The monitoring sites are located at San Luis Obispo Creek at San Luis Bay Drive (310SLB), San Luis Obispo Creek at Cuesta Park (310SLC), San Luis Obispo Creek at Mission Plaza (310SLM), San Luis Obispo Creek at

Los Osos Valley Road (310SLV).

The Basin Plan differentiates beneficial uses for this water body depending on whether it is above or below W. Marsh St. Two of the sites are located above W. Marsh St (310SLM and 310SLC) and two are located below W. Marsh St. (310SLV and 310SLB). The sites with

exceedances are located below W. Marsh St.

Data Quality Assessment: CCAMP, SWAMP QAPP.

Water Segment: San Vicente Creek

**Pollutant:** Sedimentation/Siltation

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under sections 2.1, 3.6, 3.7 and 3.10 of the Listing Policy. Under section 3.6 a

single line of evidence is necessary to assess listing status.

Several lines of evidence are available in the administrative record to assess this pollutant. Numeric data as well as information on habitat conditions in this water body have been assessed. Based on section 3.1 the site exceeds the

drinking water standard.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Twenty two of 91 measurements were in exceedance of the Title 22 Secondary MCL criterion for turbidity, and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

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

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

### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

Title 22 Secondary MCL = 5 Units

Data Used to Assess Water

Quality:

The Davenport Sanitation District (DSD), which withdraws water from San Vicente Creek to serve the town of Davenport (adjacent to San Vicente Creek) has been unable to produce potable drinking water during periods of heavy rainfall due to high levels of turbidity. Turbidity levels at the influent were measured for 31 days in December 2001, 30 days in

January 2002, and 30 days in December 2002 by the County of Santa Cruz Water and Wastewater Division at the Davenport Water influent. Twenty-two of 91 measurements were in exceedance of the criterion

(Frediani, J. 2004).

Samples were collected in San Vicente Creek at the Davenport water Spatial Representation:

treatment plant intake point.

Samples were collected daily in December 2001, January 2002, and Temporal Representation:

December 2002. Other data have been collected, but were available at

time of data solicitation.

Environmental Conditions: Records state that standards are exceeded "during periods of heavy

rainfall".

The watershed is primarily privately owned and is managed for timber production, open pit mining, cattle grazing, urbanization and water

QA/QC Equivalent: State Board was unable to obtain any QA/QC information.

#### Numeric Line of Evidence

#### Pollutant-Water

Beneficial Use:

AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SP - Fish Spawning, WI -Wildlife Habitat

Water Matrix:

Water Quality Objective/ Water Quality Criterion:

WQO: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

Data Used to Assess Water Quality:

Site one yielded 37 steelhead ranging in total length from 62 millimeters to 187 millimeters and 1 coho salmon (81mm total length). Site two yielded 67 steelhead ranging in total length from 59 to 192 mm, 2 sculpin (125mm and 137mm) and 1 coho (90 mm). Site three yielded 32 steelhead ranging in total length 53 - 188 mm and 4 sculpin ranging in length from 110 mm - 169 mm. Site four yielded 12 steelhead ranging in total length from 55 - 157mm and 1 sculpin (117mm). Site five yielded 25 steelhead ranging in total length from 60 - 206mm, 1 coho salmon (85mm) and 1 Pacific giant salamander. Site six yielded 30 steelhead ranging in total length from 54 mm - 269 mm. Site seven yielded 25 steelhead ranging in total length from 57 - 242 mm 2 Pacific giant salamanders and a red-legged frog (CCRWQCB, 2004f).

Spatial Representation:

Seven sites were sampled. The first site was located at stream mile 0.16 and included 2 mid-channel pools and a run. The second site was located at stream mile 0.49 and included a lateral scout pool (root wad enhanced), a run and a riffle. The third site was located at stream mile 1.01 and included a lateral scour pool (root wad enhanced), a riffle and a mid-channel pool. The fourth site was located at stream mile 1.95 and included a riffle, a run, and a mid-channel pool. The fifth site was located at stream mile 2.6 and included 2 mid-channel pools and a riffle. Site six was located at stream mile 2.93 and included a mid-channel, a riffle, and a plunge. Site seven was located at stream mile 3.3 and included 2

plunge pools and a step run.

Temporal Representation:

Samples were collected on October 16, 17, and 21 of 1995.

QA/QC Equivalent:

The Habitat Inventory follows the methodology from the California Salmonid Stream Habitat Restoration Manual (Flosi and Reynolds, 1991 rev. 1994). The California Conservation Corps (CCC) Technical Advisors and Watershed Stewards Project/AmeriCorps (WSP/AmeriCorps) Members that conducted the inventory were trained in standardized habitat inventory methods by the California Department of Fish and Game (DFG). This inventory was conducted by a two-person team.

Fish were sampled by DFG using a Smith-Root Model 12 backpack electrofishing unit. Sampling techniques are discussed in the California

Salmonid Stream Habitat Restoration Manual.

Numeric Line of Evidence

Narrative Description Data

Beneficial Use:

AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SP - Fish Spawning, WI -

Wildlife Habitat

Matrix:

Water

Data Used to Assess Water Quality:

Flatwater habitat types comprised 76% of the total length of the survey, riffles comprised 8%, and pools comprised 15%. The pools are relatively shallow, with only 21 of the 70 (30%) pools having a maximum depth greater than 3 feet. Fifty-seven of the 70 pool tail-outs measured had embeddedness rating greater than 50% (CCRWQCB, 2004f).

The relatively large amount of cover is provided by primarily boulders in a habitat types. The mean percent canopy density for the stream was 87% which is considered adequate cover for juvenile coho salmon and steelhead. The percentage of right and left bank covered with vegetation was moderate at 73% and 76% respectively. Two gradients riffles measured had large cobble as the dominant substrate. Large cobble was also dominant in 4 of the 7 step runs measured.

Spatial Representation:

Seven sites were sampled. San Vicente Creek is a B3 channel type for the entire 3.40 miles (17.930 feet) of stream surveyed.

Temporal Representation:

The stream was surveyed on October 16, 17, and 21 of 1995.

QA/QC Equivalent:

Biological sampling during stream inventory was used to determine fish species composition and their distribution throughout the stream. In San Vicente fish presences was observed from the stream banks and seven

sites were sampled using a Smith-Root Model 12 Backpack electrofishing unit. The sampling techniques are discussed in the

California Salmonid Stream Habitat Restoration Manual.

Line of Evidence

Pollutant-Water

Beneficial Use

AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat

Non-Numeric Objective:

WQO: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

Data Used to Assess Water Quality:

Stream Inventory Report by DFG - 1995-1996 (Frediani, J. 2004): - Over 81% of the pool tail crests surveyed had greater than 51% embeddedness.

- 76% of the surveyed stream length was flat water (indicates lack of needed pools).
- The pools surveyed were relatively shallow 70% were less than 3 feet deep.
- LWD (Large Woody Debris) was lacking in nearly all habitats.
- Mean shelter rating for pools was low with a rating of 12. A pool shelter rating of approximately 100 is desirable.
- -Threatened/endangered species in the creek (coho salmon, steelhead trout, California red-legged frog) are suffering from habitat degradation and associated decreased carrying capacity.
- Large cobble (dominant in 4 of 7 step runs measured) is considered unsuitable for spawning steelhead and coho salmon.
- The percentage of bank covered with vegetation was moderate at 73-76%.

Spatial Representation:

San Vicente Creek (304.11) was sampled. Biological sampling occurred at 7 sites and observations were made from the stream banks throughout the stream. The habitat was assessed throughout the stream with an inventory method that samples approximately 10% of the flatwater and riffle habitat.

Temporal Representation:

The San Vicente Creek Stream Inventory Report was conducted by DFG on 7/9/1996 - 7/14/1996. Fish presence was observed on Oct. 16, 17, 21, 1995.

Water Segment: Santa Maria River

**Pollutant:** Ammonia (Unionized) - Toxin

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Five of 59 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -

Cold Freshwater Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA -

Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4)

Data Used to Assess Water

Quality:

Levels of unionized ammonia greater than the general numeric water quality objective of 0.025 mg/l. Five of 59 samples exceeded the water

quality objective (CCAMP, 2004, SWAMP, 2004).

Spatial Representation: Samples were collected from three sites. Exceedances were detected in

samples collected from two of the three sites.

Temporal Representation: Samples were collected from February 2000 to March 2003.

Environmental Conditions: Santa Maria River is located in the Santa Maria hydrologic unit,

Guadalupe Hydrologic subarea. Sites are located at Santa Maria River at Bull Canyon Road (312SBC), Santa Maria River at Estuary (312SMA),

and Santa Maria River at Highway 1 (312SMI).

Data Quality Assessment: CCAMP, SWAMP QAPP.

Water Segment: Santa Maria River

**Pollutant:** Chlorpyrifos

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under sections 2.1, 3.6, and 3.10 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status while under section 3.10, a minimum of two lines of evidence are needed to assess listing

status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.6 the site has significant sediment toxicity and the pollutant is likely to cause or contribute to the toxic effect. The benthic community is impacted and may be impacted by this pollutant.

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

This conclusion is based on the staff findings that:

- 1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. Two of 2 samples were in exceedance of the aquatic life criteria, 2 of 2 sediment bulk-phase chemical analyses showed elevated concentrations of chlorpyrifos, and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The benthic community in this water body is impacted and this pollutant is associated with this impact.
- 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

### SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence

Pollutant-Water

Beneficial Use:

AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -Cold Freshwater Habitat, FR - Freshwater Replenishment, GW -Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA -

Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix:

Water

Water Quality Objective/ Water Quality Criterion:

General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or

aquatic life.

Evaluation Guideline:

CDFG Hazardous Assessment Criteria for Aquatic Life: 4-day average = 0.014 ppb, 1-hour day average = 0.025 ppb.

Data Used to Assess Water Quality:

Water was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) on two separate occasions (September 2002 and May 2003). Water was toxic at both stations in September 2002 and May 2003. Analysis of chlorpyrifos in water showed that on all occasions when water toxicity was observed, concentrations of chlorpyrifos exceeded the LC 50 for this pesticide for toxicity to Ceriodaphnia dubia (SWAMP, 2004). Toxicity Identification Evaluations of water samples from Orcutt Creek and the Santa Maria River showed toxicity to C. dubia was due to chlorpyrifos. At the station on the Santa Maria River. 2 of 2 samples were in exceedance of the aquatic life criteria.

Spatial Representation:

Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.

Temporal Representation:

Samples were collected on 9/3/2002 and 5/28/2003

QA/QC Equivalent:

Quality assurance and quality control procedures were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in

the SWAMP program.

Numeric Line of Evidence

Pollutant-Sediment

Beneficial Use:

AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -Cold Freshwater Habitat, FR - Freshwater Replenishment, GW -Groundwater Recharge, IN - Industrial Service Supply, MI - Fish

Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: General WQOs:

All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

Data Used to Assess Water Quality:

Spatial Representation:

Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) in 2002 and 2003. Sediment was toxic at both stations in both samples. Analysis of chlorpyrifos in sediment porewater showed that on all occasions when water toxicity was observed, concentrations of chlorpyrifos exceeded the LC50 for this pesticide to the amphipod Hyalella azteca (SWAMP, 2004). Toxicity Identification Evaluations of sediment samples from Orcutt Creek and the Santa Maria River showed toxicity was due to a combination of chlorpyrifos and other pesticides, likely pyrethroid pesticides (refer to attached excel spreadsheet file). Sediment bulk-phase chemical analyses showed elevated concentrations of chlorpyrifos.

oi chiorpynio

Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with

Orcutt Creek to the mouth of the Santa Maria River estuary where it

enters the Pacific Ocean.

Temporal Representation: Samples were collected on 10/22/2003.

QA/QC Equivalent: Quality assurance and quality control procedures for the primary study

were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and

are the labs participating in the SWAMP program.

Water Segment: Santa Maria River

**Pollutant:** DDT

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under sections 2.1, 3.6, and 3.10 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status while under section 3.10, a minimum of two lines of evidence are needed to assess listing

status.

Eight lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.6 the site has significant water toxicity and the pollutant is likely to cause or contribute to the toxic effect.

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

This conclusion is based on the staff findings that:

- 1. The CTR criteria used complies with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. Two of 2 total DDTs and 4,4'-DDT samples were below freshwater acute criteria, 1 of 2 measurements for 4,4'-DDD exceeded the human health criteria for water consumption, and 2 of 2 measurements for 4,4'-DDE exceeded the human health criteria for water consumption. These exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
- 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

#### Lines of Evidence:

Numeric Line of Evidence

Pollutant-Water

Beneficial Use:

AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -Cold Freshwater Habitat, FR - Freshwater Replenishment, GW -Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA -

Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix:

Water

Water Quality Objective/ Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

CTR criteria for:

Freshwater acute = 1.1 ppb for 4,4'-DDT and DDTs (total). Human Health (water consumption) = 0.00059 ppb for 4,4'-DDT. Human Health (water consumption) = 0.0059 ppb for DDTs (total).

Data Used to Assess Water

Quality:

Samples were collected on Orcutt Creek on two occasions: in 2002 and 2003. Both measurements for total DDTs and 4,4'-DDT were below freshwater acute criteria, however both measurements exceeded human health criteria for water consumption for both 4,4'-DDT and DDTs (total) (SWAMP, 2004).

Spatial Representation:

Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.

Temporal Representation:

Samples were collected on 9/3/2002 and 5/28/2003.

QA/QC Equivalent:

Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Numeric Line of Evidence

Pollutant-Sediment

Beneficial Use:

AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -Cold Freshwater Habitat, FR - Freshwater Replenishment, GW -Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA -Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Sediment

Water Quality Objective/ General WQOs: Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

Freshwater Sediment Criteria (Policy):

DDT(sum) = 62.9 ppbDDTs(total) = 572

Data Used to Assess Water

Quality:

Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) on two separate occasions (June 2002 and May 2003). Sediment was toxic at both stations in both samples (SWAMP, 2004). Sediment bulk-phase chemical analyses showed elevated concentrations of DDTs. In the Santa Maria River sample, the sediment criterion for DDT (sum) was exceeded (62.9 ppb) in 2002, but not in 2003. The DDTs (total) criterion (572 ppb) was not exceeded on either occasion.

Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Spatial Representation:

Orcutt Creek to the mouth of the Santa Maria River estuary where it

enters the Pacific Ocean.

Temporal Representation: Samples were collected on 6/28/2002 and 10/22/2003.

Quality assurance and quality control procedures for chemistry, toxicity QA/QC Equivalent:

testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the

SWAMP program.

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -

> Cold Freshwater Habitat, FR - Freshwater Replenishment, GW -Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA -

Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion:

Central Coast RWQCB Basin Plan: No individual pesticide or combination of pesticides shall reach concentrations that adversely affect

beneficial uses. There shall be no increase in pesticide concentrations

found in bottom sediments or aquatic life.

Evaluation Guideline: 1000 ng/g - NAS Guideline (whole fish).

Data Used to Assess Water

Quality:

Two out of 2 samples exceeded (TSMP, 2002). A total of 2 whole fish composite samples of starry flounder and threespine stickleback were collected. The flounder sample was collected in 1992 and the stickleback

in 1999. The guideline was exceeded in both samples.

Spatial Representation: One station located just above the beach area at the mouth of the river.

Temporal Representation: Samples were collected in 1992 and 1999.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 Data Report.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

#### Numeric Line of Evidence

Pollutant-Water

Beneficial Use:

AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA -

Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix:

Water

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

CTR criteria for:

Human Health (water consumption) = 0.00083 ppb for 4,4'-DDD.

Data Used to Assess Water

Quality:

Samples were collected on the Santa Maria River on two occasions: in 2002 and 2003. One of 2 measurements for 4,4'-DDD exceeded the human health criteria for water consumption (0.00083 ppb) (SWAMP,

2004).

Spatial Representation: Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with

Orcutt Creek to the mouth of the Santa Maria River estuary where it

enters the Pacific Ocean.

Temporal Representation: Samples were collected on 9/3/2002 and 5/28/2003.

QA/QC Equivalent: Quality assurance and quality control procedures for chemistry, toxicity

testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the

SWAMP program.

Numeric Line of Evidence

Pollutant-Sediment

Beneficial Use:

AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -Cold Freshwater Habitat, FR - Freshwater Replenishment, GW -Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA -Warm Freshwater Habitat. WI - Wildlife Habitat

Sediment

Matrix:

Water Quality Objective/ Water Quality Criterion:

General WQOs:

All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

Freshwater Sediment Criteria: DDD(sum) = 28.0 ppb.

Data Used to Assess Water Quality:

Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) in 2002 and 2003 (SWAMP, 2004). Sediment was toxic at both stations in both samples. Sediment bulk-phase chemical analyses showed elevated concentrations of DDTs. In the Santa Maria River sample, the sediment criterion for DDD (sum) was not exceeded on either occasion.

Spatial Representation:

Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.

Temporal Representation:

Samples were collected on 6/28/2002 and 10/22/2003.

QA/QC Equivalent:

Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Numeric Line of Evidence

Pollutant-Water

Beneficial Use:

AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -Cold Freshwater Habitat, FR - Freshwater Replenishment, GW -Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA -

Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix:

Water

Water Quality Objective/ Water Quality Criterion:

All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

CTR criteria for:

Human Health (water consumption) = 0.00059 ppb for 4,4'-DDE.

Data Used to Assess Water

Quality:

Samples were collected on the Santa Maria River on two occasions: in 2002 and 2003 (SWAMP, 2004). Two of 2 measurements for 4,4'-DDE exceeded the human health criteria for water consumption (0.00059 ppb).

Spatial Representation:

Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.

Temporal Representation:

Samples were collected on 9/3/2002 and 5/28/2003.

QA/QC Equivalent:

Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

#### Numeric Line of Evidence

Pollutant-Sediment

Beneficial Use:

AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -Cold Freshwater Habitat, FR - Freshwater Replenishment, GW -Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA -Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix:

Sediment

Water Quality Objective/ Water Quality Criterion:

General WQOs:

All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

Freshwater Sediment Criteria (Policy):

DDE(sum) = 31.3 ppb

Data Used to Assess Water

Quality:

Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) in 2002 and 2003 (SWAMP, 2004). Sediment was toxic at both stations in both samples. Sediment bulk-phase chemical analyses showed elevated concentrations of DDTs. In the Santa Maria River samples, the sediment criterion for DDE (sum) was exceeded in 2003, but not in 2002.

Spatial Representation:

Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.

Temporal Representation:

Samples were collected on 6/28/2002 and 10/22/2003.

QA/QC Equivalent:

Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Line of Evidence

Pollutant-Tissue

Beneficial Use

AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Non-Numeric Objective:

All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

Data Used to Assess Water Quality:

Concentrations of pesticides were measured in sand crabs (Emerita analoga) collected at the mouth of the Santa Maria River estuary in August 2000 (Dugan et al. 2004). These samples were collected as part of a larger coastline survey in Region 3 that collected sand crabs from a number of beaches. The range of sampling extended from Carpinteria Beach in Ventura County at the southern end of Region 3 to Scott Creek in Santa Cruz County at the northern end of Region 3. Concentrations of DDT in sand crab tissues at the mouth of the Santa Maria River were higher than any other site measured in Region 3, and were as high as 556 ng/g dry wt in samples nearest the Santa Maria River estuary. Mean concentrations of total DDT in sand crabs from the Santa Maria River area were 350 ng/g (dry wt). Results of a gradient study of tissues loads in sand crabs collected north and south of the river mouth confirmed that the Santa Maria River was the source of DDT in sand crab tissues.

These results are consistent with previous BPTCP studies that found DDT in sediments from the Santa Maria River estuary were among the highest measured in the state (Total DDT = 679.5  $\mu$ g/kg dry wt., Downing et al. 1998 Section VII). High total DDT in the sediment sample from this station corresponded with high sediment toxicity to amphipods (amphipod Eohaustorius estuarius mortality = 98%; Downing et al. 1998, Section II).

Spatial Representation:

Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean. Samples were collected at 4 sites at the mouth of the Santa Maria River: 150S, 300S, 450S, and 600S (river).

Temporal Representation:

Samples were collected during May and August 2000 and February 2001.

Water Segment: Santa Maria River

**Pollutant:** Dieldrin

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence can be used to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.1 There are sufficient number of samples exceeding the CTR Human Health Criteria for consumption of water and organisms. The site does not show significant sediment toxicity and the benthic community is not impacted.

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

This conclusion is based on the staff findings that:

- 1. There is a water column guideline available complies with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. Two of 2 samples were in exceedance of the CTR Human Health water and organism consumption criterion and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. However, the sediment samples were below the detection limit.
- 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

### SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards for the pollutant are exceeded.

#### Lines of Evidence:

Numeric Line of Evidence

Pollutant-Water

Beneficial Use:

AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA -

Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix:

Water

Water Quality Objective/ Water Quality Criterion: General WQOs:

All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of

appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or

aquatic life.

CTR Human Health Criterion for consumption of Water & Organisms =

0.00014 ppb.

Data Used to Assess Water

Quality:

Samples were collected on the Lower Santa Maria River in September 2002 and May 2003 (SWAMP, 2004). Two of 2 samples were in exceedance of the criterion for water consumption, however both samples were below the freshwater acute criterion (0.24 ppb).

Spatial Representation:

Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it

enters the Pacific Ocean.

Temporal Representation:

Samples were collected on 9/3/2002 and 5/28/2003.

QA/QC Equivalent:

Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the

SWAMP program.

Numeric Line of Evidence

Pollutant-Sediment

Beneficial Use:

AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA -

Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix:

Sediment

Water Quality Objective/ Water Quality Criterion:

General WQOs:

All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

Freshwater Sediment criterion: max Dieldrin = 6.18 ppm

Data Used to Assess Water

Quality:

Sediment was sampled in the Santa Maria River (SMA) in October 2003 and the dieldrin level was below the detection limit (SWAMP, 2004).

Spatial Representation:

Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it

enters the Pacific Ocean.

Temporal Representation:

QA/QC Equivalent:

One sample was collected on 10/22/2003.

Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the

SWAMP program.

#### Line of Evidence

#### Pollutant-Tissue

Beneficial Use

AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -Cold Freshwater Habitat, FR - Freshwater Replenishment, GW -Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA -Warm Freshwater Habitat, WI - Wildlife Habitat

Non-Numeric Objective:

All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

Evaluation Guideline:

NAS Tissue guideline = 100 ppb (NAS, 1972).

Data Used to Assess Water Quality:

Concentrations of pesticides were measured in sand crabs (Emerita analoga) collected at the mouth of the Santa Maria River estuary in August 2000 (Dugan et al. 2004). These samples were collected as part of a larger coastline survey in Region 3 that collected sand crabs from a number of beaches. The range of sampling extended from Carpinteria Beach in Ventura County at the southern end of Region 3 to Scott Creek in Santa Cruz County at the northern end of Region 3.

Samples were all below the numeric criterion.

Spatial Representation: Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with

Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean. Samples were collected at 4 sites at the mouth

of the Santa Maria River: 150S, 300S, 450S, and 600S (river).

Temporal Representation: Samples were collected during May and August 2000 and February

2001.

Santa Maria River **Water Segment:** 

Pollutant: **Endrin** Decision: List

This pollutant is being considered for placement on the section 303(d) list Weight of Evidence:

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two out of 2 samples exceeded the NAS guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

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

#### Lines of Evidence:

Pollutant-Tissue Numeric Line of Evidence

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Central Coast RWQCB Basin Plan: No individual pesticide or Water Quality Criterion:

combination of pesticides shall reach concentrations that adversely affect

beneficial uses. There shall be no increase in pesticide concentrations

found in bottom sediments or aquatic life.

Evaluation Guideline: 100 ng/g NAS guideline (whole fish) (NAS, 1972).

Data Used to Assess Water

Quality:

Two out of 2 samples exceeded (TSMP, 2002). A total of 2 whole fish composite samples of starry flounder and threespine stickleback and were collected. The flounder was collected in 1992 and the stickleback in

1999. The guideline was exceeded in both samples.

Spatial Representation: One station located just above the beach area at the mouth of the river. Temporal Representation: Samples were collected in 1992 and 1999.

Data Quality Assessment:

Toxic Substances Monitoring Program 1992-93 Data Report. Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game

Water Segment: Santa Ynez River (below city of Lompoc to Ocean)

**Pollutant:** Nitrate as Nitrate (NO3)

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under sections 3.5, and 3.6 of the Listing Policy. Under section 3.6 a single

line of evidence is necessary to assess listing status.

Currently, Santa Ynez River (below the City of Lompoc to Ocean) is listed for nutrients. It is not possible, in a general listing, to determine which specific pollutant is causing or contributing to water quality impacts. There is sufficient justification for removing the general listings for nutrients from the 303(d) list and replace these general listings with the specific pollutants when found to be exceeding.

One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.5 and 3.6, the site does have exceedances. Water toxicity has been documented in this water body. Fifteen of 84 samples exceeded the water quality objective.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Fifteen of the 84 water samples exceeded the water quality guideline and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

#### SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL listed for Nitrate

(as NO3) in Domestic or Municipal Supply is 45 mg/L).

Data Used to Assess Water

Quality:

Fifteen of 40 samples collected at both sampling sites exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004; SWAMP, 2004). Forty-four samples were collected at 3 sites located between the upper reach of the City of Lompoc and the Highway 154 crossing below the Lake Cachuma dam. There were no exceedances out of these 44 samples at these 3 sites.

Spatial Representation: Samples were collected from five sites. Exceedances were detected in

samples collected from two of the five sites (314SYF, 314SYN). These two sites showing exceedances also have extremely high orthophosphate levels. Upstream sites did not have exceedances. The sampling area with exceedances was below the City of Lompoc to the

ocean.

Temporal Representation: Samples were collected from January 2001 through March 2003.

Environmental Conditions: The water body is located in the Santa Ynez hydrologic unit, Lompoc

hydrologic area, Lompoc hydrologic subarea. The sites are located at Santa Ynez River at Highway 101 (314SYI), Santa Ynez River at Paradise Road (314SYP), Santa Ynez River downstream of Lake

Cachuma (314SYC), Santa Ynez River downstream Lompoc at Floordale

(314SYF), Santa Ynez River upstream Lompoc at Highway 246

(314SYL).

Data Quality Assessment: CCAMP, SWAMP QAPP.

Water Segment: Shuman Canyon Creek

**Pollutant:** Sedimentation/Siltation

**Decision:** List

Weight of Evidence: The data and information in the administrative record supports this change in

the original listing recommendation. There was a misunderstanding of the applicable water body recommended for listing by staff. This change will

correct that mistake.

The correction is requested for San Antonio Creek (South Coast Watershed) Sedimentation/Siltation. This water body was incorrectly assigned to a sedimentation/siltation problem. The correct water bodies are Shuman Canyon Creek and Casmalia Canyon Creek. The 303(d) List Table should be revised to remove San Antonio Creek (South Coast Watershed) for Sedimentation/Siltation and add Casmalia Canyon Creek (4.5 miles) and Shuman Canyon Creek (3.0 miles) (313004) for Sedimentation/Siltation. The original listing recommendation originated with Regional Board staff, however there was a misunderstanding of the applicable water body recommended for

listing by staff. This change will correct that mistake.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that a water body was incorrectly assigned to a sedimentation/siltation problem and that the listing should be revised with this water body and the

listing should be changed as presented.

#### Lines of Evidence:

**Line of Evidence** Pollutant-Water

Beneficial Use AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), ES -

Estuarine Habitat, FR - Freshwater Replenishment, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Information Used to Assess

Water Quality:

See file: "FS - Correction-San Antonio Creek.doc" for further information.

Data Used to Assess Water

Quality:

The correction is requested for San Antonio Creek (South Coast Watershed) Sedimentation/Siltation. This water body was incorrectly assigned to a sedimentation/siltation problem. The correct water bodies are Shuman Canyon Creek and Casmalia Canyon Creek.

The 303(d) List Table should be revised to remove San Antonio Creek (South Coast Watershed) for Sedimentation/Siltation and add Casmalia Canyon Creek (4.5 miles) and Shuman Canyon Creek (3.0 miles)

(313004) for Sedimentation/Siltation.

The original listing recommendation originated with Regional Board staff,

however there was a misunderstanding of the applicable water body recommended for listing by staff. This change will correct that mistake.

Spatial Representation: 3.0 miles.

Temporal Representation: Correction Submittal on 6/14/2004.

Water Segment: Soda Lake

**Pollutant:** Ammonia (Unionized) - Toxin

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this

pollutant. Three measurements exceed the water quality objective.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of

the Policy.

3. Three of 7 samples exceeded the water quality objective and this exceeds

the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, MI - Fish Migration, RA - Rare &

Endangered Species, WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4)

Data Used to Assess Water

Quality:

Three out of seven samples exceeded the general water quality objective

(CCAMP, 2004; SWAMP, 2004).

Spatial Representation: Samples were collected from two sites. Exceedances were detected in

samples collected from both sites.

Temporal Representation: Samples were collected from January 2000 to May 2000.

**Environmental Conditions:** 

The water body is located in the Carrizo Plain hydrologic unit, Carrizo Plain hydrologic subarea. Sites are located at Soda Lake Northeast (311SLE) and Soda Lake Culverts at Seven Mile Road (311SLN).

CCAMP, SWAMP QAPP. Data Quality Assessment:

Tembladero Slough **Water Segment:** 

Pollutant: Ammonia (Unionized) - Toxin

Decision: List

This pollutant is being considered for placement on the section 303(d) list Weight of Evidence:

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this

pollutant. Six measurements exceed the water quality objective.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of

the Policy.

3. Six of 40 samples exceeded the water quality objective and this exceeds

the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: ES - Estuarine Habitat, RA - Rare & Endangered Species, SP - Fish

Spawning, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters.

Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4)

Data Used to Assess Water

Quality:

Six out of 40 samples exceeded the general water quality objective

(CCAMP, 2004; SWAMP, 2004).

Spatial Representation: Samples were collected from two sites. Exceedances were detected in

water samples collected from both sites.

Temporal Representation: Samples were collected from March 1999 to March 2003.

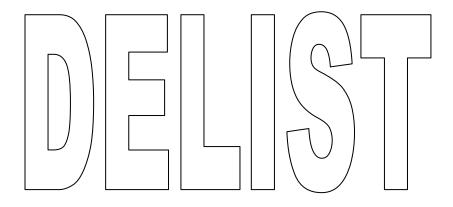
Environmental Conditions: Water body is located in the Salinas hydrologic unit, Lower Salinas

hydrologic subarea. The sites are located at Tembladero Slough at Monterey Dunes Way (309TDW) and Tembladero Slough at Preston

(309TEM).

Data Quality Assessment: CCAMP, SWAMP QAPP.

# Central Coast Region (3)



Recommendations to remove waters and pollutants from the section 303(d) List

**Water Segment:** Blosser Channel

Fecal Coliform Pollutant:

Decision: Delist

Weight of Evidence:

This pollutant is being considered for removal from the section 303(d) list under section 4.3 (Bacteria) of the Listing Policy. Under section 4.3 a single line of evidence is adequate to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. This data represents only the retention pond overflow as the up stream channel was dry most of the year. The original listing was faulty. Data were not representative of ambient water quality.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. This data represents only the retention pond overflow as the up stream channel was dry most of the year. The original listing was faulty. Data were not representative of ambient water quality.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff** Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because the original listing was faulty.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during

any 30-day period exceed 400/100 ml.

Data Used to Assess Water

Quality:

Five of 10 samples exceed the water quality objectives (CCAMP, 2004).

Spatial Representation: There was one sampling site. This data represents only the retention pond overflow as the upstream channel was dry most of the year.

Temporal Representation: There were monthly sampling events. All 3 exceedances of the objective

were during summer months when flows were primarily from the retention basin overflow. Since 2002 a new housing development is being built at the site location and the retention basin has been drained (since 2004).

Data Quality Assessment: CCAMP

Water Segment: Carpinteria Marsh (El Estero Marsh)

Pollutant: Sedimentation/Siltation

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. The Policy calls for the delisting of waters if the decision is found to be based on faulty data and it is demonstrated that the listing would not have occurred in the absence of such faulty data. One line of evidence is available in the administrative record to assess this

pollutant.

The data cannot be found that was used to list this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for maintaining the listing for this

water segment-pollutant combination.

This conclusion is based on the staff findings that no data is available to assess the status of this water body for this pollutant. Pursuant to section 4.11

of the Listing Policy, no additional data and information are available

indicating that standards are met.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because no data are available to support the listing.

Lines of Evidence:

Line of Evidence Pollutant-Water

BI - Preserva.of Bio.Hab.of Spec.Signif., ES - Estuarine Habitat, MI - Fish

Migration, SP - Fish Spawning, WA - Warm Freshwater Habitat

Information Used to Assess

Water Quality:

Carpinteria Marsh was originally listed on the section 303(d) list because Regional Board staff observed erosion and sedimentation in the 1980s.

This listing basis is faulty because it is not based on any data. Regional Board staff is not aware of evidence to indicate current water quality standard exceedances or beneficial use impacts related to the listing for

this pollutant.

Non-Numeric Objective: Basin Plan: The suspended sediment load and suspended sediment

discharge rate of surface waters shall not be altered in such a manner as

to cause nuisance or adversely affect beneficial uses.

Water Segment: Chumash Creek

Pollutant: Oxygen, Dissolved

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.2 of the Listing Policy. Under section 4.2 a single line of

evidence is necessary to assess listing status.

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

objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1.The data used satisfies the data quality requirements of section 6.1.4 of the

Policy.

2.The data used satisfies the data quantity requirements of section 6.1.5 of

the Policy.

3. Forty of 245 samples taken over a period of 10 years exceeded the DO cold fresh water quality objective of 7 mg/l and this does not exceed the allowable

frequency listed in Table 4.2 of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

exceeded.

# **Lines of Evidence:**

Numeric Line of EvidenceAdverse Biological ResponsesBeneficial Use:CO - Cold Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: COLD freshwater habitat water quality objective for D.O. = 7 mg/l

(minimum).

Data Used to Assess Water

Quality:

Chumash Creek was placed on the 2002 303(d) list as impaired from dissolved oxygen because levels fell below the COLD freshwater habitat water quality objective of 7 mg/l. Forty samples of a total of 245 samples

taken between 1993 and 2003 fall below this value (CCRWQCB, 2004k).

Spatial Representation: Measurements were taken at 310CHU on Chumash Creek, Calwater

watershed no. 31022012.

Temporal Representation: Two hundred forty five samples were collected over a ten year period of

6/8/1993-7/16/2003. Samples were collected on a monthly or bi-monthly

basis.

QA/QC Equivalent: Water column data collected by RWQCB staff in 1993-2001 were taken

according to the National Monitoring Program Quality Assurance Program Plan. Samples taken in 2003 by the Morro Bay Volunteer Monitoring Program were taken according to protocols for dissolved oxygen sampling in the Morro Bay National Estuary Program's Quality

Assurance Program Plan.

The Morro Bay Volunteer Monitoring Program staff have routine correspondence with volunteers regarding data review, meter operation, and safety. Volunteer monitors collect dissolved oxygen data according to the Morro Bay National Estuary Program's Quality Assurance Program

Plan.

Water Segment: Espinosa Slough

Pollutant: Nutrients

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.1 of the Listing Policy. Under section 4.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. This water body pollutant combination was originally listed without any supporting data. There has never been nor is there currently any data to

support listing of this water body combination.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that no samples were ever taken to determine if the nutrient water quality objective were exceeded. Pursuant to section 4.11 of the Listing Policy, no additional data and information are

available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because it cannot be determined if applicable water quality

standards are not attained.

#### Lines of Evidence:

Line of Evidence -N/A

Beneficial Use CM - Commercial and Sport Fishing (CA), R1 - Water Contact

Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater

Habitat. WI - Wildlife Habitat

Non-Numeric Objective: Request for delisting - Applicable water quality objectives include nutrient

related water quality objectives, including: 1) the water quality objective for unionized ammonia of 0.025 mg/L-N, and 2) the narrative objective for

biostimulatory substances stating that substances cannot cause

nuisance aquatic growths.

Data Used to Assess Water

Quality:

From delisting report: "The Espinosa Slough is currently listed on the 303(d) list as impaired for nutrients. Regional board staff proposes delisting this water body. The Espinosa Slough is located in the lower Salinas River watershed. It was originally placed on the 303(d) list in 1994. At that time, virtually all water bodies located in the lower Salinas valley were listed for nutrients, and often without any supporting data. The listing was based on fact that the surrounding land use is irrigated agriculture, and was therefore believed to be impaired for nutrients.

There has never been, nor is there currently, any data for this body of water. In addition, there exists no anecdotal information to suggest or support impairment."

Espinosa Slough (Calwater watershed: 30911010) in Monterey County Spatial Representation:

Temporal Representation: Submittal on 6/14/2004.

Water Segment: Goleta Slough/Estuary

Pollutant: Metals

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. The Policy calls for the delisting of waters if the decision is found to be based faulty data and it is demonstrated that the listing would not have occurred in the absence of such faulty data. One line of evidence is available in the administrative record to assess this pollutant.

The data cannot be found that was used to list this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for maintaining the listing for this water segment-pollutant combination.

This conclusion is based on the staff findings that no data is available to assess the status of this water body for this pollutant. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available

indicating that standards are met.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because no data are available to support the listing.

Lines of Evidence:

Line of Evidence Pollutant-Water

Beneficial Use ES - Estuarine Habitat, WA - Warm Freshwater Habitat

Information Used to Assess

Water Quality:

RWQCB staff have stated that State Mussel Watch, Toxic Substances Monitoring Programs and Regional Board sampling were probably used to develop this listing. The specific sample data referenced cannot be located in Regional Board files and exceedances cannot be verified. According to Dave Hubbard (UCSB), the fact that silver and copper associate with industrial activities was a possible reason the Slough was listed. However, these types of practices have not been occurring since the 1980s and are probably not a source of impairment any longer.

It is unknown why the Slough was listed as impaired for metals in the first place.

Water Segment: Goleta Slough/Estuary

Pollutant: Sedimentation/Siltation

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. The Policy calls for the delisting of waters if the decision is found to be based faulty data and it is demonstrated that the listing would not have occurred in the absence of such faulty data. One line of evidence is available in the administrative record to assess this pollutant.

The data cannot be found that was used to list this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for maintaining the listing for this water segment-pollutant combination.

This conclusion is based on the staff findings that no data is available to assess the status of this water body for this pollutant. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available

indicating that standards are met.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because no data are available to support the listing.

Lines of Evidence:

Line of Evidence Adverse Biological Responses

Beneficial Use ES - Estuarine Habitat, WA - Warm Freshwater Habitat

Information Used to Assess

Water Quality:

Goleta Slough was placed on the section 303(d) list because Regional

Board Staff observed erosion and sedimentation in the 1980s.

This listing is faulty because no data is available to support the listing. Regional Board staff are not aware of evidence to indicate current water quality standards exceedances or beneficial use impacts related to the

listing for this pollutant.

Non-Numeric Objective: Basin Plan: The suspended sediment load and suspended sediment

discharge rate of surface waters shall not be altered in such a manner as

to cause nuisance or adversely affect beneficial uses.

Water Segment: Monterey Bay South (Coastline)

Pollutant: Metals

**Decision:** Delist

Weight of Evidence:

One line of evidence is available in the administrative record to assess this pollutant. The listing is faulty. The listing has been cited as 'metals' rather than listing for the pollutant responsible for the impairment. There is no guideline for metals and it cannot be determined if the pollutant is likely to cause or contribute to the toxic effect.

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

This conclusion is based on the staff findings that:

- 1. The listing was based on EDLs that do not comply with the requirements of section 6.1.3 of the Policy and a water quality guideline for metals is not available that complies with the requirements of section 6.1.3 of the Policy.

  2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Line of Evidence -N/A

Beneficial Use BI - Preserva.of Bio.Hab.of Spec.Signif., CM - Commercial and Sport

Fishing (CA), MA - Marine Habitat, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WI - Wildlife

Habitat

Non-Numeric Objective: Request to delist - Delisting report refers to OEHHA and USEPA tissue

quidance values.

Data Used to Assess Water

Quality:

There is a proposal to Delist Monterey Bay - South (shoreline) for Metals. The existing 1994 listing is based on State Mussel Watch (SMW) metals data from within Monterey Harbor (SMWP, 2004). No metals impairment exists outside of Monterey Harbor and Monterey Harbor is on the 303(d) List as a separate metals impairment listing (and will remain on the list).

Regional Board files indicate State Mussel Watch Program data from 1982 through 1993 was used as the basis for listing Monterey Bay – South for metals impairment. The available data from 1982 through 1993

were compared to Elevated Data Levels (EDLs) and Median International Standards (MIS). EDLs are no longer considered valid guidelines for determining attainment of water quality standards. The MIS values that were used as indicator values were derived from freshwater fish and therefore were not appropriate comparison values for mussel tissue data. MIS values also are not regulatory values or criteria in the United States. Subsequent to the 1994 listing, additional State Mussel Watch data from 1994 through 1997 has become available. All of the available data were compiled for this evaluation of Monterey Bay - South with respect to metals impairment.

Spatial Representation:

Monterey Bay - South coastline: 3309.5004, at Pacific Grove SMW

station (SMW #414.0).

Temporal Representation:

Submittal on 6/14/2004. State Mussel Watch data from 1977 through

1997.

Water Segment: Monterey Bay South (Coastline)

Pollutant: Pesticides

**Decision:** Delist

Weight of Evidence:

One line of evidence is available in the administrative record to assess this pollutant. The listing is faulty. The listing has been cited as "pesticides" rather than listing for the pollutant responsible for the impairment. There is no guideline for pesticides and it cannot be determined if the pollutant is likely to cause or contribute to the toxic effect.

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

This conclusion is based on the staff findings that:

- 1. The listing was based on EDLs that do not comply with the requirements of section 6.1.3 of the Policy and a water quality guideline for pesticides is not available that complies with the requirements of section 6.1.3 of the Policy.

  2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Line of Evidence -N/A

Beneficial Use BI - Preserva.of Bio.Hab.of Spec.Signif., CM - Commercial and Sport

Fishing (CA), MA - Marine Habitat, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WI - Wildlife

Habitat

Non-Numeric Objective: Request to delist - Delisting report refers to OEHHA and USEPA tissue

quidance values.

Data Used to Assess Water

Quality:

There is a proposal to Delist Monterey Bay - South (shoreline) for Pesticides. The existing 1994 listing is based on State Mussel Watch (SMW) pesticides data that was compared to Elevated Data Levels (EDLs - which are now considered inappropriate comparison values) (SMWP, 2004). The pesticide data from 1988 to present does not exceed current applicable guidance values and, in fact, the only station sampled

since 1988 is the station that is used by the SMW program as a reference site for the central coast (presumed to be relatively

unimpaired). No pesticide impairment exists outside of Moss Landing

Harbor and Moss Landing Harbor will remain on the List as a separate

pesticide impairment.

Monterey Bay - South coastline: 3309.5004, at Pacific Grove SMW station (SMW #414.0). Spatial Representation:

Temporal Representation: Submittal on 6/14/2004. State Mussel Watch data from 1982 through

1997.

Water Segment: Morro Bay

Pollutant: Metals

**Decision:** Delist

Weight of Evidence:

This combined pollutant listing is being considered for removal from the section 303(d) list under section 4 of the Listing Policy. The Policy calls for the delisting of waters if the decision is found to be faulty and it is demonstrated that the listing would not have occurred in the absence of such faulty data. Nine different lines of evidence are available in the administrative record to assess this pollutant listing. The listing included Aluminum, Arsenic, Cadmium, Chromium, and Mercury, which were combined into one listing originally included in the 1996-303(d) metals listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of section 6.1.3 the Listing Policy.

With the exception of Arsenic, determination of exceedances for the remaining metals (individually evaluated) were either not possible because no criteria or guidelines were available but also no exceedances were recorded when compared with applicable acceptable standards either.

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

This conclusion is based on the staff findings that the guidelines used to assess the status of this water body for the set of metals evaluated does not meet the requirement of the Listing Policy but no exceedances were recorded when each metal was evaluated using acceptable guidelines. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA), MA - Marine Habitat

Matrix: Tissue

Evaluation Guideline: OEHHA screening values of 0.3 ppm.

Data Used to Assess Water

Quality:

None of the 12 samples exceeded the OEHHA screening value at the 4

sampling stations (Keeling, 2003).

Spatial Representation:

Four sites were sampled on Morro Bay: 427.0, 428.5, 429.0, and 429.2.

Temporal Representation:

Sampling occurred from 5-30-1980 to 1-20-1993.

Environmental Conditions:

This is one of five metals originally included in the 1996-303(d) metals listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of the Listing Policy. Two samples out of eight

were found to be above the EDL 85 values (0.06 ppm) with

concentrations of 0.136 ppm and 0.061 ppm wet weight on 1/26/1987 and 1/20/1993 respectively. Both samples were taken at site 429.2.

Data Quality Assessment:

State Mussel Watch Program Quality Assurance Plan.

Numeric Line of Evidence

Pollutant-Water

Beneficial Use:

CM - Commercial and Sport Fishing (CA), MA - Marine Habitat

Matrix:

Water

Water Quality Objective/ Water Quality Criterion: Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses. Waters shall not contain settleable material in concentrations that result in deposition of material

that causes nuisance or adversely affects beneficial uses.

Evaluation Guideline:

There are no acute or chronic criteria for dissolved mercury in saltwater

that meets the requirements of the Listing Policy.

Data Used to Assess Water

Quality:

None of the five samples taken in Morro Bay exceeded because there are no guidelines for dissolved mercury in the saltwater column that meet

the requirements of the Listing Policy (Keeling, 2003).

Spatial Representation:

Water was sampled from five (5) separate locations meant to represent the back, middle and front of the Bay and were also meant to represent the flow from the two creeks that feed the Bay (sites were Front Bay, Middle Bay, Back Bay, Mouth Chorro and Mouth Los Osos. The stations are: Back Bay, Mouth Los Osos, Mouth Chorro, Middle Bay and Front

Bay.

Temporal Representation:

Water was sampled on March 8, 2001.

Data Quality Assessment:

Battelle Laboratory Quality Assurance Plan.

Numeric Line of Evidence

Pollutant-Water

Beneficial Use:

CM - Commercial and Sport Fishing (CA), MA - Marine Habitat

Matrix:

Water

Evaluation Guideline:

There is no evaluation guideline for the dissolved fraction of chromium for

the protection of aquatic like in marine waters that meets the

requirements of the Listing Policy.

Data Used to Assess Water

Quality:

None of the five samples taken can be compared with the established water quality objective because the established water quality objective is in the total form of chromium and the available data is reported in the

dissolved fraction (Keeling, 2003).

Spatial Representation: Water was sampled from five (5) separate locations representing the

back, middle and front of the Bay including inflows from the mouth of Chorro and the mouth of Los Osos creeks that feed into the Bay. The stations are: Back Bay, Mouth Los Osos, Mouth Chorro, Middle Bay and

Front Bay.

Temporal Representation: Water was sampled on March 8, 2001.

Environmental Conditions: This is one of five metals originally included in the 1996-303(d) metals

listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not

meet the requirements of the Listing Policy.

Data Quality Assessment: Battelle Laboratory Quality Assurance Plan.

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA), MA - Marine Habitat

Matrix: Tissue

Evaluation Guideline: There is no numeric criteria or guideline that meets the requirements of

the Listing Policy for chromium in tissue.

Data Used to Assess Water

Quality:

None of the 12 samples could be evaluated because there are no

numeric criteria or guidelines that meets the requirements of the Listing

Policy for chromium in tissue (Keeling, 2003).

Spatial Representation: Four sites were sampled on Morro Bay: 427.0, 428.5, 429.0, and 429.2.

Temporal Representation: Site 429.0 was sampled on 6/28/1982, 1/21/1983 and 5/3/1983. Site

429.2 was

sampled on 1/26/1987, 3/14/1988, 12/19/1988, 2/2/1990 and 1/20/1993.

Sampling for all other sites occurred from 5-30-98 to 1-20-93.

Environmental Conditions: This is one of five metals originally included in the 1996-303(d) metals

listing. The listing was originally based on exceedances of Median

International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not

meet the requirements of the Listing Policy.

Data Quality Assessment: State Mussel Watch Program Quality Assurance Plan.

**Numeric Line of Evidence** Pollutant-Water

Beneficial Use: CM - Commercial and Sport Fishing (CA), MA - Marine Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Waters shall not contain suspended material in concentrations that cause

nuisance or adversely affect beneficial uses. Material Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses.

Water quality objective in marine environment - total concentration 0.2

dao.

Evaluation Guideline: CTR Saltwater acute 42 μg/L Criterion Maximum Concentration (CMC)

and saltwater chronic 9.3 µg/L Criterion Continuous Concentration (CCC)

criteria is applicable.

Data Used to Assess Water

Quality:

None of five samples taken in Morro Bay exceeded any CTR criteria for dissolved cadmium in saltwater. Cadmium concentrations ranged from

0.0686 to 0.0349 µg/L (Keeling, 2003).

Spatial Representation: Water was sampled from five (5) separate locations representing the

back, middle and front of the Bay including the inflows from the mouth Chorro and the mouth of Los Osos creeks that feed into the Bay. The stations were: Back Bay, Mouth Los Osos, Mouth Chorro, Middle Bay

and Front Bay.

Temporal Representation: Water was sampled on March 8, 2001.

Environmental Conditions: This is one of five metals originally included in the 1996-303(d) metals

listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not

meet the requirements of the Listing Policy.

Data Quality Assessment: Battelle Laboratory Quality Assurance Plan.

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA), MA - Marine Habitat

Matrix: Tissue

Evaluation Guideline: USEPA standard of 4.0 ppm (wet weight) and OEHHA standard of 3.0

ppm (wet weight).

Data Used to Assess Water

Quality:

None of 12 samples from the 4 stations were in exceedance when the data was reevaluated using USEPA and OEHHA criteria (Keeling, S.

2003).

Spatial Representation: Four sites were sampled on Morro Bay: 427.0, 428.5, 429.0, and 429.2.

Temporal Representation: Sampling occurred from 5-30-1980 to 1-20-1993.

Environmental Conditions: This is one of five metals originally included in the 1996-303(d) metals

listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of the Listing Policy. Site 429.2, on 1/26/1987, 3/14/1988, 12/19/1988, 2/2/1990 and 1/20/1993 had levels over the MIS values (levels ranged from 1.01 – 1.23 ppm wet weight). Five out of five samples at site 429.2 were over MIS. One out of three samples were above MIS values at site 429.0 (6/28/1982, 1.17 ppm wet weight).

Data Quality Assessment: State Mussel Watch Program Quality Assurance Plan.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CM - Commercial and Sport Fishing (CA), MA - Marine Habitat

Matrix: Water

Water Quality Objective/ Waters shall not contain suspended material in concentrations that cause

Water Quality Criterion: nuisance or adversely affect beneficial uses. Waters shall not contain settleable material in concentrations that result in deposition of material

that causes nuisance or adversely affects beneficial uses.

Evaluation Guideline: The CTR criteria for the dissolved fraction of selected metals are

applicable for the protection of aquatic life but there are no criteria or

guidelines for the dissolved fraction of aluminum that meet the

requirements of the Listing Policy.

Data Used to Assess Water

Quality:

No exceedances were recorded for all 5 samples because there are no criteria or guidelines for the dissolved fraction of aluminum that meet the

requirements of the Listing Policy (Keeling, 2003).

Spatial Representation: There were five sampling sites throughout Morro Bay. Locations

represented the back, middle, and front of the Bay including inflows from Chorro and Los Osos Creeks. The stations were: Back Bay, Mouth Los

Osos, Mouth Chorro, Middle Bay and Front Bay.

Temporal Representation: Water was sampled on March 8, 2001.

Environmental Conditions: This is one of five metals originally included in the 1996-303(d) metals

listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not

meet the requirements of the Listing Policy.

Data Quality Assessment: Battelle Laboratory Quality Assurance Plan.

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA), MA - Marine Habitat

Matrix: Tissue

Evaluation Guideline: There are no tissue criteria for Aluminum.

Data Used to Assess Water

Quality:

Originally, one out of 12 analyzed samples exceeded the EDL 85 of 138.43 ppm. However, no exceedances are currently recorded because

there are no criteria or guidelines for aluminum in tissue that meet the

requirements of the Listing Policy (Keeling, 2003).

Spatial Representation: There were four stations sampled: 427.0, 428.5, 429.0 and 429.2.

Temporal Representation: Site 429.0 was sampled on 6/28/1982, 1/21/1983 and 5/3/1983. Site

429.2 was sampled on 1/26/1987, 3/14/1988, 12/19/1988, 2/2/1990 and 1/20/1993. Site 427.0 was sampled 5-30-1980 and 12-14-1980. Site

428.5 was sampled 5-30-1980 and 12-14-1980.

Environmental Conditions: This is one of five metals originally included in the 1996-303(d) metals

listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not

meet the requirements of the Listing Policy (section 6.1.3.2).

Data Quality Assessment: State Mussel Watch Program Quality Assurance Plan.

Line of Evidence -N/A

Beneficial Use CM - Commercial and Sport Fishing (CA), MA - Marine Habitat

Non-Numeric Objective: Request for delisting. Applicable WQO or criterion:

·Basin Plans water quality objectives for marine water

Basin Plans narrative objective for settleable and suspended material California Toxics Rule (Federal Register. Volume 65, No. 97. Part III. Environmental Protection Agency, 40 CFR Part 131. Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants

for the State of California; Rule. Thursday, May 18, 2000.)

Data Used to Assess Water

Quality:

Regional Board staff recommends delisting Morro Bay for metals based

on the fact that (Keeling, S. 2003):

·Water quality objectives are currently being met in the water column, ·Metals present in the sediment appear to be the natural result of local

geology and do not represent pollution,

Levels of metals in tissue appear to be at reasonable levels considering

the natural geology of the area, and

•There appears to be no correlation between the concentration of metals

in the sediment and the water above it.

Spatial Representation: Morro Bay (Calwater watershed 31023012), located on the central coast

of California, about 60 miles north of Point Conception and about 100

miles south of Monterey Bay in San Luis Obispo County.

Temporal Representation: Submittal on 6/14/2004.

Water Segment: Salinas Reclamation Canal

Pollutant: Nitrogen, Nitrate

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.1 of the Listing Policy. Under section 4.1 a listing can be

removed from the list if it was based on faulty data.

The Salinas Reclamation Canal was erroneously listed as impaired for nitrate because it was assumed that this water body is designated to support the MUN beneficial use. However, the Salinas Reclamation Canal is not designated to support the MUN beneficial use, and the nitrate water quality

objective therefore does not apply.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because the water body was erroneously designated to support the MUN beneficial use, the water quality objective therefore does not apply and applicable water quality standards for the pollutant are not exceeded.

#### Lines of Evidence:

Line of Evidence -N/A

Beneficial Use CM - Commercial and Sport Fishing (CA), R1 - Water Contact

Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater

Habitat, WI - Wildlife Habitat

Information Used to Assess

Water Quality:

CCAMP and CCoWS datasets.

Non-Numeric Objective: From the delisting report: "Applicable water quality objectives: the 303(d)

listing is for nitrate, which is protected by the nitrate water quality objective protecting the MUN beneficial use. Since the water body is not designated to support the MUN beneficial use, the nitrate water quality

objective does not apply."

Data Used to Assess Water

Quality:

The Salinas Reclamation Canal is currently listed on the 303(d) list as impaired for nitrate. Regional Board staff proposed delisting this water body for nitrate. The Salinas Reclamation Canal is located in the lower Salinas River watershed. It was placed on the 303(d) list in 2002. The

Salinas Reclamation Canal was listed as impaired for nitrate because data indicated that the nitrate water quality objective protecting the MUN beneficial use was being exceeded. The nitrate water quality objective

protecting the MUN beneficial use is 10 mg/L-N. The Salinas Reclamation Canal was erroneously listed as impaired for nitrate

because it was assumed that this water body is designated to support the MUN beneficial use. However, the Salinas Reclamation Canal is not designated to support the MUN beneficial use, and the nitrate water

quality objective therefore does not apply.

Salinas Reclamation Canal (Calwater watershed: 30911010) in Monterey County. Spatial Representation:

Temporal Representation: Submittal on 6/14/2004.

Water Segment: Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds

30910 and 30920)

Pollutant: Sedimentation/Siltation

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. The Policy calls for the delisting of waters if the decision is found to be based faulty data and it is demonstrated that the listing would not have occurred in the absence of such faulty data. One line of evidence is available in the administrative record to assess this pollutant.

The data cannot be found that was used to list this pollutant originally.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for maintaining the listing for this

water segment-pollutant combination.

This conclusion is based on the staff findings that no data is available to assess the status of this water body for this pollutant. Pursuant to section 4.11

of the Listing Policy, no additional data and information are available

indicating that standards are met.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because no data are available to support the listing.

Lines of Evidence:

Line of Evidence Pollutant-Water

Beneficial Use WA - Warm Freshwater Habitat

Information Used to Assess

Water Quality:

No data are available to assess this listing.

This listing is faulty because no data area available to support the listing. Regional Board staff is not aware of evidence to indicate current water quality standards exceedances or beneficial use impacts related to the

listing for this pollutant.

Non-Numeric Objective: Basin Plan: The suspended sediment load and suspended sediment

discharge rate of surface waters shall not be altered in such a manner as

to cause nuisance or adversely affect beneficial uses.

Water Segment: Salinas River (middle, near Gonzales Rd crossing to confluence with

Nacimiento River)

Pollutant: Sedimentation/Siltation

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. The Policy calls for the delisting of waters if the decision is found to be based faulty data and it is demonstrated that the listing would not have occurred in the absence of such faulty data. One line of evidence is available in the administrative record to assess this pollutant.

The data cannot be found that was used to list this pollutant originally.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for maintaining the listing for this

water segment-pollutant combination.

This conclusion is based on the staff findings that no data is available to assess the status of this water body for this pollutant. Pursuant to section 4.11

of the Listing Policy, no additional data and information are available

indicating that standards are met.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because no data are available to support the listing.

Lines of Evidence:

Line of Evidence Pollutant-Water

Beneficial Use WA - Warm Freshwater Habitat

Information Used to Assess

Water Quality:

No data are available to assess this listing.

This listing is faulty because no data area available to support the listing. Regional Board staff is not aware of evidence to indicate current water quality standards exceedances or beneficial use impacts related to the

listing for this pollutant.

Non-Numeric Objective: Basin Plan: The suspended sediment load and suspended sediment

discharge rate of surface waters shall not be altered in such a manner as

to cause nuisance or adversely affect beneficial uses.

Water Segment: Salinas River Lagoon (North)

Pollutant: Sedimentation/Siltation

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. The Policy calls for the delisting of waters if the decision is found to be based faulty data and it is demonstrated that the listing would not have occurred in the absence of such faulty data. One line of evidence is available in the administrative record to assess this pollutant.

The original listing was based on visual observations. No data was used to list this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for maintaining the listing for this water segment-pollutant combination.

This conclusion is based on the staff findings that no data is available to assess the status of this water body for this pollutant. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available

indicating that standards are met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because no data are available to support the listing.

**Lines of Evidence:** 

**Line of Evidence** Pollutant-Water

Beneficial Use ES - Estuarine Habitat

Information Used to Assess

Water Quality:

Original listing was based on Regional Board staff visual observations of

erosion. No data or QA/QC information available.

The basis for this listing basis is faulty because no data are available to support the listing. Regional Board staff is not aware of evidence to indicate current water quality standards exceedances or beneficial use

impacts related to the listing for this pollutant.

Non-Numeric Objective: Basin Plan: The suspended sediment load and suspended sediment

discharge rate of surface waters shall not be altered in such a manner as

to cause nuisance or adversely affect beneficial uses.

Water Segment: Salinas River Refuge Lagoon (South)

Pollutant: Nutrients

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.1 of the Listing Policy. Under section 4.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. There has never been, nor is there currently, any data for this body

of water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the section 303(d) list.

SWRCB Staff Recommendation:

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

exceeded.

Lines of Evidence:

Line of Evidence -N/A

Beneficial Use BI - Preserva.of Bio.Hab.of Spec.Signif., CM - Commercial and Sport

Fishing (CA), CO - Cold Freshwater Habitat, MI - Fish Migration, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SH - Shellfish Harvesting, WA - Warm Freshwater

Habitat, WI - Wildlife Habitat

Non-Numeric Objective: From delisting report: No applicable water quality objectives apply

because the area cannot support beneficial uses as described in the Water Quality Control Plan. This is contradictory to the current Water Quality Control Plan that articulates beneficial uses to be supported: the

Water Quality Control Plan will need to be amended.

Data Used to Assess Water

Quality:

The Salinas River Refuge Lagoon (South) is currently listed on the 303(d) list as impaired for nutrients. Regional Board staff proposed delisting this water body. The Salinas River Refuge Lagoon (South) is located in the lower Salinas River watershed. It was originally placed on the 303(d) list in 1994. At that time, virtually all water bodies located in the lower Salinas valley were listed for nutrients, and often without any supporting data. The listing was based on fact that the surrounding land use is irrigated agriculture, and was therefore believed to be impaired for nutrients. There has never been, nor is there currently, any data for this body of water. In addition, there exists no anecdotal information to suggest or support impairment. Most importantly, the Salinas River Refuge Lagoon (South) is not a receiving water body of water flowing in

the Salinas River Watershed. Rather, it is a depression in the land adjacent to the Pacific Ocean. The depression sporadically retains water during and after some high tide events and extreme rain events, and then

soon returns to a terrestrial land area thereafter.

Spatial Representation: Salinas River Refuge Lagoon (South) (Calwater watershed: 30911010) in

Monterey County.

Temporal Representation: Submittal on 6/14/2004.

Water Segment: Salinas River Refuge Lagoon (South)

Pollutant: Pesticides

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. The Policy calls for the delisting of waters if the decision is found to be based faulty data and it is demonstrated that the listing would not have occurred in the absence of such faulty data. One line of evidence is available in the administrative record to assess this pollutant.

The data cannot be found that was used to list this pollutant originally.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for maintaining the listing for this

water segment-pollutant combination.

This conclusion is based on the staff findings that no data is available to assess the status of this water body for this pollutant. Pursuant to section 4.11

of the Listing Policy, no additional data and information are available

indicating that standards are met.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because no data are available to support the listing.

Lines of Evidence:

Line of Evidence Testimonial Evidence

Beneficial Use WA - Warm Freshwater Habitat

Information Used to Assess

Water Quality:

No data are available. Regional Board staff is not aware of evidence to indicate current water quality standards exceedances or beneficial use

impacts related to the listing for this pollutant.

Water Segment: Salinas River Refuge Lagoon (South)

Pollutant: Salinity/TDS/Chlorides

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. The Policy calls for the delisting of waters if the decision is found to be based faulty data and it is demonstrated that the listing would not have occurred in the absence of such faulty data. One line of evidence is available in the administrative record to assess this pollutant.

The data cannot be found that was used to list this pollutant originally.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for maintaining the listing for this

water segment-pollutant combination.

This conclusion is based on the staff findings that no data is available to assess the status of this water body for this pollutant. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available

indicating that standards are met.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because no data are available to support the listing.

Lines of Evidence:

Line of Evidence Testimonial Evidence

Beneficial Use WA - Warm Freshwater Habitat

Information Used to Assess

Water Quality:

No data are available. Regional Board staff is not aware of evidence to indicate current water quality standards exceedances or beneficial use impacts related to the listing for this pollutant.

The Refuge Lagoon experiences a wide range of salinities depending on the stage of the Salinas River. During high flows, the Refuge Lagoon may be inundated by the Salinas River and therefore may experience salinities comparable to freshwater (<1 ppt). During high surf, breakers may overtop the dunes to the west of the refuge lagoon and it may experience salinities comparable to seawater (~35 ppt). During the summer, the refuge lagoon may evaporate, raising salinity concentrations to over 150 ppt. These are all natural states for the water body as it is configured today therefore the Salinas River Refuge Lagoon (South) should be delisted for Salinity/TDS/Chlorides.

Water Segment: San Antonio Creek (South Coast Watershed)

Pollutant: Sedimentation/Siltation

**Decision:** Delist

Weight of Evidence: The correction is requested for San Antonio Creek (South Coast Watershed)

Sedimentation/Siltation. This water body was incorrectly assigned to a sedimentation/siltation problem. The correct water bodies are Shuman

Canyon Creek and Casmalia Canyon Creek.

The 303(d) List Table should be revised to remove San Antonio Creek (South Coast Watershed) for Sedimentation/Siltation and add Casmalia Canyon Creek (4.5 miles) and Shuman Canyon Creek (3.0 miles) (313004) for

Sedimentation/Siltation.

The original listing recommendation originated with Regional Board staff, however there was a misunderstanding of the applicable water body recommended for listing by staff. This change will correct that mistake.

SWRCB Staff Recommendation:

Lines of Evidence:

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

#### Line of Evidence

-N/A

Beneficial Use

AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), GW - Groundwater Recharge, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Data Used to Assess Water Quality:

The correction is requested for San Antonio Creek (South Coast Watershed) Sedimentation/Siltation. This water body was incorrectly assigned to a sedimentation/siltation problem. The correct water bodies are Shuman Canyon Creek and Casmalia Canyon Creek.

The 303(d) List Table should be revised to remove San Antonio Creek (South Coast Watershed) for Sedimentation/Siltation and add Casmalia Canyon Creek (4.5 miles) and Shuman Canyon Creek (3.0 miles) (313004) for Sedimentation/Siltation.

The original listing recommendation originated with Regional Board staff, however there was a misunderstanding of the applicable water body recommended for listing by staff. This change will correct that mistake.

Spatial Representation: San Antonio Creek (South Coast Watershed)

Temporal Representation: Correction Submittal on 6/14/2004.

Water Segment: San Luis Obispo Creek (Below W Marsh Street)

Pollutant: Priority Organics

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.1 of the Listing Policy. Under section 4.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this

pollutant. One of the samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The guidelines used do not satisfy the requirements of section 6.1.3 of the

Policy.

2. The listing was based on MTRLs and EDLs which are not allowed by the

Listing Policy.

3. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are met.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because it cannot be determined if the applicable water quality

standards for the pollutant are exceeded.

#### Lines of Evidence:

Line of Evidence -N/A

Beneficial Use AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -

Cold Freshwater Habitat, GW - Groundwater Recharge, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SP -

Fish Spawning, WI - Wildlife Habitat

Non-Numeric Objective: Request for delisting - document mentions criteria based on:

OEHHA and USEPA tissue guidance values

CTR for water column data

Data Used to Assess Water

Quality:

This is a proposal to remove San Luis Obispo Creek from the 303(d) list for priority organics. San Luis Obispo Creek (Creek) was placed on the

1998 303(d) list as impaired from priority organics because levels of PCB, HCH (lindane) and chlordane exceeded MTRLs and EDLs. A total

of two tissue samples were used to list the Creek as impaired

(CVRWQCB, 2004N).

MTRLs and EDLs are no longer considered criteria for placing water bodies on the 303(d) list. RWQCB staff have therefore developed a listing rationale for organic compounds. The rationale is largely based on efforts by Dave Smith and Peter Kozelka of EPA and their work on the Newport Bay/San Diego Creek toxicity TMDL. The rationale is compiled in a document held in Region-3 titled Decision Document for the Elkhorn Slough. The rationale is used herein as support for recommending that the Creek be delisted for priority organics.

The RWQCB of the Central Coast Region recommends delisting San Luis Obispo Creek as impaired by priority organics. RWQCB staff make this recommendation based on the analysis presented in the delisting report concluding that there exists insufficient evidence suggesting that the constituents of concern (PCB, chlordane, and HCH) are present at levels posing a risk to humans or wildlife.

Spatial Representation:

San Luis Obispo Creek in San Luis Obispo County near and including the City of San Luis Obispo - Hydrologic Unit 310.240

Water Segment: Waddell Creek, East Branch

Pollutant: Nutrients

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.1 of the Listing Policy. Under section 4.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this

pollutant. None of the samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of

the Policy.

3. None of the 54 samples exceeded the unionized ammonia water quality objective and this does not exceed the allowable frequency listed in Table 4.1

of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

exceeded.

#### Lines of Evidence:

Line of Evidence -N/A

Beneficial Use BI - Preserva.of Bio.Hab.of Spec.Signif., CM - Commercial and Sport

Fishing (CA), CO - Cold Freshwater Habitat, FR - Freshwater

Replenishment, GW - Groundwater Recharge, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SP - Fish Spawning, WI -

Wildlife Habitat

Non-Numeric Objective: From delisting report:

The Water Quality Control Plan, Central Coast Region (Basin Plan),

contains the following unionized ammonia objective:

The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters. The Water Quality Control Plan, Central Coast Region (Basin Plan),

contains the following narrative objective:

Biostimulatory Substances:

Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.

This objective does not prohibit biostimulatory substances; it only prohibits biostimulatory substances that cause nuisance or adversely affects beneficial uses.

Data Used to Assess Water Quality:

Fifty-four samples were collected and the objective was not exceeded in any of the samples (CVRWQCB, 2004B).

#### From Report:

The east fork of the Waddell Creek was listed as impaired for nutrients in 1990. The creek was listed because of ammonia violations at the NPDES facility, California Department of Parks and Recreation, Big Basin Redwoods State Park Wastewater Treatment Plant. Another reason for the listing was the California Department of Fish and Game issued a report in 1980 indicating dense growths of filamentous algae were growing downstream of the treatment plant in sunlight areas. They attributed the algal growth to nutrients.

Ammonia discharge violations have reoccurred in the past but no violations have occurred since 2002. Ammonia is converted to nitrate through the nitrogen cycle and becomes available as a possible promoter of plant growth. Since the listing in 1990, the treatment plant has been upgraded. The upgrade included the addition of clinoptolite filtration for ammonia removal. Ammonia violations have dramatically decreased since 1998.

Spatial Representation:

Waddell Creek, East Branch (Calwater Watershed: 30411010), located in Santa Cruz County, California approximately two-thirds of the way from San Francisco to Monterey Bay. Samples were collected at: West Waddell Creek upstream confluence of East Waddell Creek; Opal Creek upstream confluence of East Waddell Creek; Blooms Creek upstream confluence of East Waddell Creek; East Branch of Waddell Creek 145 feet upstream of NPDES discharge; East Branch of Waddell Creek 100 feet downstream of NPDES discharge; East Branch of Waddell Creek approximately 1000 feet upstream of old Last Chance Road bridge crossing; East Branch of Waddell Creek at old Last Chance Road bridge crossing; East Waddell Creek upstream confluence of West Waddell Creek; Lower Waddell Creek; Lower Waddell at Alder Camp; Lower Waddell at bridge; Lower Waddell at Marsh Trail.

Temporal Representation:

Started sampling and collecting information on September 24, 2002. We completed the sampling and collection on October 7, 2003.

Water Segment: Watsonville Slough

Pollutant: Sedimentation/Siltation

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under sections 4.9 of the Listing

Policy. Under section 4.9, a minimum of two lines of evidence are needed to

assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. No data is presented to show impacts or lack of impacts on aquatic life populations or communities. Suspended solids concentrations are well below the level that may impact at least one species present in Watsonville Slough. Visual assessment of sedimentation did not reveal any probable impacts.

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

This conclusion is based on the staff findings that:

- 1. The guideline used complies generally with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. None of the 338 samples exceeded the evaluation guideline. No data are available to show impacts on aquatic life.
- 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

## SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as

to cause nuisance or adversely affect surface waters.

Evaluation Guideline: Three spine stickleback occurs in the Slough and in studies no mortality

was observed in a test to identify the lethal threshold for sediment at a

concentration of 28,000 mg/L (LeGore and Des Voigne, 1973).

Data Used to Assess Water

Quality:

Sediment concentration has been studied by many investigators. All available data was reviewed and summarized by (Hager, J. and F.

Watson 2005).

For suspended sediment concentration, 338 representative

measurements are available. None of the measurements exceed the

sediment threshold.

Spatial Representation: Samples were collected at least 13 stations throughout the slough

system.

Temporal Representation: Samples were collected between 1976 and 2004 during all seasons.

Data Quality Assessment: Most of the data were collected under a Quality Assurance Project Plan

prepared by Central Coast Watershed Studies, The Watershed Institute

at California State University Monterey Bay.

#### Line of Evidence

Narrative Description Data Beneficial Use

Information Used to Assess

Water Quality:

WA - Warm Freshwater Habitat Smothering of benthic habitat by sedimentation was not significantly

evident, but was also difficult to study. A visual reconnaissance was conducted for signs of excessive recent sedimentation. Unequivocal smothering of habitat could only be documented photographically in small portions of the Watsonville Slough system. Other areas were either stable, contained coarse sediment, contained fine sediment in amounts that did not contradict the expectation of a natural system, were under water, or were not accessible (Hager, J. and F. Watson 2005).

Non-Numeric Objective: Basin Plan: The suspended sediment load and suspended sediment

discharge rate of surface waters shall not be altered in such a manner as

to cause nuisance or adversely affect surface waters.

#### Line of Evidence

Beneficial Use

Narrative Description Data

WA - Warm Freshwater Habitat

Information Used to Assess Water Quality:

Long-term aggregation of sediments and reduction in aquatic habitat volume was not evident. Aquatic habitat volume appears to be increasing due to land subsidence associated with de-watering of the area for peat mining and agriculture in the early 1900s, ground water pumping, and possibly local seismic activity. Scientists re-surveyed an old road survey across Struve Slough and Watsonville Slough, and found evidence of subsidence on the order of 10 to 20 mm/year since 1952. Obtained sediment cores in the tidal marsh of lower Watsonville Slough dating back to the 1400s and they were analyzed using radiocarbon dating. pollen, and lead-210. The data suggested an anthropogenic increase in sedimentation surrounding the expansion of agriculture in the first half of the 1900s, but net sedimentation rates since about 1950 appear to have been lower than in pre-historic times. This is likely attributed to decreased sediment supply to the lower reaches resulting from subsidence and the construction of the tide gates in the 1940s (Hager, J.

and F. Watson 2005).

Non-Numeric Objective:

Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect surface waters.

# Central Coast Region (3)

# Area Change

Recommendations to change the area affected by pollutants on the section 303(d) List

Water Segment: Alamo Creek

Pollutant: None

**Decision:** Accept Area Change

Weight of Evidence: The data and information in the administrative record supports this change in

estimated size affected.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes

that the estimated size affected should be changed as presented.

**Lines of Evidence:** 

Line of Evidence -N/A

Beneficial Use AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -

Cold Freshwater Habitat, GW - Groundwater Recharge, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SP - Fish Spawning, WA - Warm

Freshwater Habitat, WI - Wildlife Habitat

Data Used to Assess Water

Quality:

Email from Lisa McCann of RWQCB3 including the following files: "FS - Correction-maps Rec Canal-Alamo-Or-Sol-LosOsosRevised.doc" and "Map\_Alamo Creek, Orcutt Solomon\_correction.doc". The map shows requested changes and states "Include this reach for Alamo Creek" (the reach above 312ALA). This reach has been identified as an incorrect reach identified as a listed water body on the shapefile for all listed

pollutants.

Spatial Representation: Alamo Creek (312) in Santa Barbara County.

Temporal Representation: Email from Lisa McCann dated 7/14/2004.

Water Segment: Los Osos Creek

Pollutant:

**Decision:** Accept Area Change

Weight of Evidence: The data and information in the administrative record supports this change in

estimated size affected.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes

that the estimated size affected should be changed as presented.

**Lines of Evidence:** 

Line of Evidence -N/A

Beneficial Use AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -

Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Information Used to Assess

Water Quality:

See files: "FS - Correction-maps Rec Canal-Alamo-Or-Sol-

LosOsosRevised.doc" and "Map\_Los Osos

Creek correction Revised.doc".

Non-Numeric Objective: Map changes-no objective.

Data Used to Assess Water

Quality:

Email from Lisa McCann of RWQCB3 including the following files: "FS - Correction-maps Rec Canal-Alamo-Or-Sol-LosOsosRevised.doc" and "Map\_Los Osos Creek\_correction\_Revised.doc". The map shows requested changes and states "Remove upper reaches of Los Osos Creek From 303(d) shapefile". This reach has been identified as an incorrect reach identified as a listed water body on the shapefile for all

listed pollutants.

Spatial Representation: This map change request affects the upper reaches of Los Osos Creek in

San Luis Obispo County.

Temporal Representation: Email from Lisa McCann dated 7/14/2004.

Orcutt Creek Water Segment:

Pollutant:

Accept Area Change Decision:

The data and information in the administrative record supports this change in Weight of Evidence:

estimated size affected.

SWRCB Staff

After review of the available data and information, SWRCB staff concludes

that the estimated size affected should be changed as presented. Recommendation:

Lines of Evidence:

Line of Evidence -N/A

Beneficial Use AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO -

Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal &

Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation,

RA - Rare & Endangered Species, WI - Wildlife Habitat

Data Used to Assess Water

Quality:

Email from Lisa McCann of RWQCB3 including the following files: "FS -Correction-maps Rec Canal-Alamo-Or-Sol-LosOsosRevised.doc" and "Map Alamo Creek, Orcutt Solomon correction.doc". The map shows requested changes and states, "Add the reach between 3120RC and

3120RI to shape file and listing for fecal and nitrate."

Spatial Representation: Orcutt-Solomon Creek (312) in Santa Barbara County.

Temporal Representation: Email from Lisa McCann dated 7/14/2004.

Water Segment: Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)

**Pollutant:** Total Coliform

**Decision:** Accept Area Change

Weight of Evidence: The data and information in the administrative record supports this change in

correctly assigning the water body pollutant combination to this area.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes

that the estimated size affected should be changed as presented.

Lines of Evidence:

**Line of Evidence** Pollutant-Water

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

See file: "3-5u\_FS - Correction-Arroyo Burro Creek pathogens.doc" for

further information.

Data Used to Assess Water Quality:

The correction is requested for Arroyo Burro Creek Pathogens (Cal Watershed 31532010). This water body was incorrectly assigned to a pathogen problem. The correct water body is the Pacific Ocean at Arroyo Burro Beach (Santa Barbara County). Arroyo Burro Creek was listed in 1998 because of beach closures. Therefore, the beach, rather than the creek, should have been listed.

The Pacific Ocean at Arroyo Burro Creek is on the 2002 303(d) List (for Total Coliform). Therefore the only correction necessary is to delete

Arroyo Burro Creek.

Spatial Representation: Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)

Temporal Representation: Correction Submittal on 6/14/2004. Original listing in 1998.

Line of Evidence

Pollutant-Water

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

See file: "3-5t\_FS - Correction- Santa Barbara Co Beaches.doc" for

further information.

Data Used to Assess Water Quality:

There are three beaches in Santa Barbara County that have a larger impacted size than most of the other beaches. We believe the extent of impairment should be similar to the convention used for most Santa Barbara County beaches. There is no evidence in the record to support the larger area extent indicated on the current list. Please reduce the size for Pacific Ocean at Arroyo Burro Beach from 3.1 miles to 0.06 miles.

Pacific Ocean at Arroyo Burro Beach, in Santa Barbara County (31532010). Change from 3.1 miles to 0.06 miles. Spatial Representation:

Correction Submittal on 6/14/2004. Temporal Representation:

Water Segment: Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa

Barbara County)

Pollutant: Coliform Bacteria

**Decision:** Accept Area Change

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.3 of the Listing Policy. Under section 4.3 a single line of

evidence is necessary to assess delisting status.

One line of evidence is available in the administrative record to assess this pollutant. The available line of evidence requests a correction in the aerial extent of coliform bacteria impairment. There are three beaches in Santa Barbara County that have a larger impacted size than most of the other beaches. The extent of impairment should be similar to the convention used for most Santa Barbara County beaches. There is no evidence to support the larger aerial extent indicated on the current list. The extent of impairment for Pacific Ocean at Carpinteria State Beach should be reduced from 0.35 miles to 0.06 miles.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list but the size extent of the impairment should be reduced from 0.35 miles to 0.06 miles. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded but the size of the impaired area is smaller than originally listed.

#### **Lines of Evidence:**

Line of Evidence Pollutant-Water

Beneficial Use AG - Agricultural Supply

Information Used to Assess

Water Quality:

See file: "3-5t\_FS - Correction- Santa Barbara Co Beaches.doc" for

further information.

Non-Numeric Objective: Correction - no objective.

Data Used to Assess Water

Quality:

There are three beaches in Santa Barbara County that have a larger impacted size than most of the other beaches. We believe the extent of impairment should be similar to the convention used for most Santa Barbara County beaches. There is no evidence in the record to support the larger aerial extent indicated on the current list. Please reduce the size for Pacific Ocean at Carpinteria State Beach from 0.35 miles to 0.06

miles.

Pacific Ocean at Carpinteria State Beach, Carpinteria Creek mouth in Santa Barbara County (31534020). Change from 0.35 miles to 0.06 Spatial Representation:

miles.

Correction Submittal on 6/14/2004. Temporal Representation:

Water Segment: Pacific Ocean at Jalama Beach (Santa Barbara County)

Pollutant: Bacteria

**Decision:** Accept Area Change

Weight of Evidence: The data and information in the administrative record supports this change in

estimated size affected.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes

that the estimated size affected should be changed as presented.

Lines of Evidence:

Line of Evidence -N/A

Beneficial Use AQ - Aquaculture

Information Used to Assess

Water Quality:

See file: "3-5t\_FS - Correction- Santa Barbara Co Beaches.doc" for

further information.

Data Used to Assess Water

Quality:

There are three beaches in Santa Barbara County that have a larger impacted size than most of the other beaches. We believe the extent of impairment should be similar to the convention used for most Santa Barbara County beaches. There is no evidence in the record to support the larger aerial extent indicated on the current list. Please reduce the size for Pacific Ocean at Jalama Beach from 3.3 miles to 0.06 miles.

Spatial Representation: Pacific Ocean at Jalama Beach, in Santa Barbara County (31510051).

Change from 3.3 miles to 0.06 miles.

Temporal Representation: Correction Submittal on 6/14/2004.

Rider Creek Water Segment:

Pollutant:

Decision: Accept Area Change

The data and information in the administrative record supports this change in Weight of Evidence:

water body name.

**SWRCB Staff** 

After review of the available data and information, SWRCB staff concludes

that the water body name should be changed as presented. Recommendation:

Lines of Evidence:

Line of Evidence -N/A

Beneficial Use CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat,

> GW - Groundwater Recharge, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation,

SP - Fish Spawning, WI - Wildlife Habitat

Information Used to Assess

Water Quality:

See files: "3-5s\_FS - Correction- Rider Creek.doc", "3-5kk\_Map\_Rider

Creek1.jpg", and "3-5II Map Rider Creek2 - topo.jpg" for further

information.

Data Used to Assess Water

Quality:

This submission is a request to correct the name of a listed water body.

The incorrect name of the listed water body is Rider Gulch Creek. This

name should be corrected to Rider Creek.

Associated figures included a photocopy of USGS 7.5-minute quadrangle map, Loma Prieta, California (1996) and a GIS figure that was derived from the CALWTR3 dataset. The CALWATER watershed number that is

referenced on the 303d list is correct (30510010).

Spatial Representation: Rider Creek (CAL Watershed 30510010).

Temporal Representation: Correction Submittal on 6/14/2004.

Water Segment: Salinas Reclamation Canal

Pollutant: None

**Decision:** Accept Area Change

Weight of Evidence: The data and information in the administrative record supports this change in

estimated size affected.

SWRCB Staff

After review of the available data and information, SWRCB staff concludes

**Recommendation:** that the estimated size affected should be changed as presented.

**Lines of Evidence:** 

Line of Evidence -N/A

Beneficial Use CM - Commercial and Sport Fishing (CA), R1 - Water Contact

Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater

Habitat, WI - Wildlife Habitat

Data Used to Assess Water

Quality:

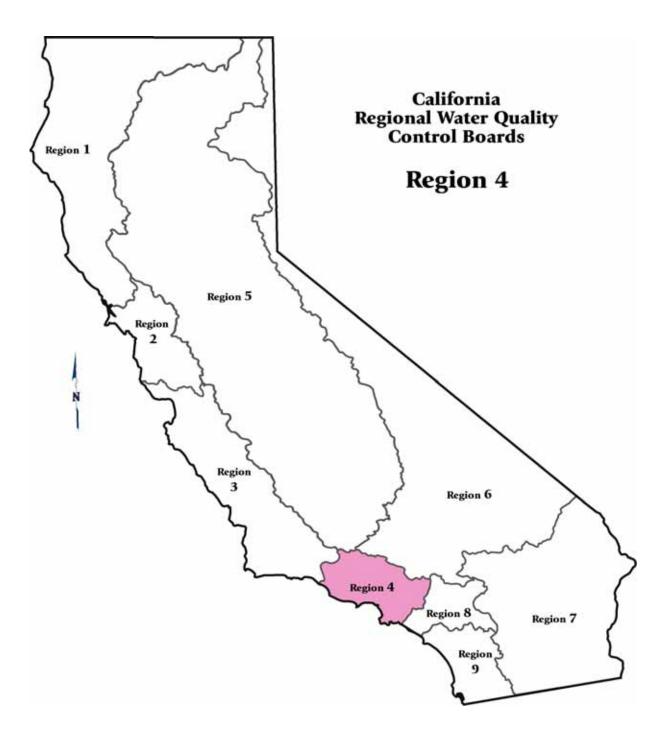
The Salinas Reclamation Canal is not identified, nor is it included in the Reach3 file. This water body needs to be added to the shapefile and identified as listed. The map shows the reaches to be added and states "Add Waterbody and show listing. Salinas Reclamation Canal flows

parallel to Alisal Slough."

Spatial Representation: Salinas Reclamation Canal (309) in Monterey County.

Temporal Representation: Request submitted via email on 7/14/2004.

# Fact Sheets Supporting Revision of the Section 303(d) List



November 2006

### **Table of Contents**

W OR REVISED FACT SHEETS	15
ISTING RECOMMENDATIONS	16
Aliso Canyon Wash	17
Fecal Coliform	
Burbank Western Channel	19
Cyanide	19
Compton Creek	21
Trash	
Dominguez Channel (lined portion above Vermont Ave)	
Sediment Toxicity	
Dominguez Channel Estuary (unlined portion below Vermont Ave)	
Benzo[a]anthracene	
Echo Park Lake	
Trash	
Lincoln Park Lake	
Trash	
Los Angeles Harbor - Fish Harbor	
Benzo[a]anthracene	
Chrysene (C1-C4)	
Copper	
Dibenz[a,h]anthracene	
Lead	
Mercury	
Phenanthrene	
Pyrene	
Sediment Toxicity	
Zinc	
Los Angeles River Estuary (Queensway Bay)	
Sediment Toxicity	
Trash  Los Angeles River Reach 1 (Estuary to Carson Street)	
Trash	
Los Angeles River Reach 2 (Carson to Figueroa Street)	
Trash	
Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	
Trash	
Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)	
TrashTrash	
Los Angeles River Reach 5 ( within Sepulveda Basin)	
Trash	
Los Cerritos Channel	
Trash	
Peck Road Park Lake	
Trash	
11UUII	0 1

San Pedro Bay Near/Off Shore Zones	62
Chlordane	62
Santa Clara River Reach 6 (W Pier Hwy 99 to Bouquet Cyn Rd) (was named Santa Cl	ara
River Reach 8 on 2002 303(d) lists)	
Chlorpyrifos	
LIOT AS DENIS APPRESSED DESCRIPTIONS	00
LIST AS BEING ADDRESSED RECOMMENDATIONS	66
Abalone Cove Beach	
Indicator Bacteria	
Aliso Canyon Wash	
Selenium	
Ballona Creek	
Copper	
Shellfish Harvesting Advisory	
Toxicity	
Trash	
Ballona Creek Estuary	
Chlordane	
Copper	
DDT	
Lead	
Polychlorinated biphenyls	
Polycyclic Aromatic Hydrocarbons (PAHs)	
Sediment Toxicity	
Zinc	
Ballona Creek Wetlands	94
Trash	94
Big Rock Beach	
Coliform Bacteria	95
Bluff Cove Beach	96
Indicator Bacteria	
Brown Barranca/Long Canyon	98
Nitrate and Nitrite	98
Burbank Western Channel	99
Copper	
Cabrillo Beach (Outer)	101
Indicator Bacteria	
Calleguas Creek Reach 1 (was Mugu Lagoon on 1998 303(d) list)	103
Chlordane	103
DDT	
Endosulfan	
Nitrogen	
Polychlorinated biphenyls	
Sediment Toxicity	
Calleguas Creek Reach 2 (estuary to Potrero Rd- was Calleguas Creek Reaches 1 an	
on 1998 303d list)	
Ammonia	
ChemA	
Chlordane	
DDT	
Endosulfan	115

Nitrogen	. 116
Polychlorinated biphenyls	117
Sediment Toxicity	
Sedimentation/Siltation	
Toxaphene	
Calleguas Creek Reach 3 (Potrero Road upstream to confluence with Conejo Creek or	
1998 303d list)	
DDT	
Dieldrin	
Nitrate and Nitrite	
Sedimentation/Siltation	
Toxaphene	
Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central	
Avenue on 1998 303d list)	
ChemA	
Chlordane	
Chlorpyrifos	
DDT	
Dieldrin	
Endosulfan	
Nitrate as Nitrate (NO3)	
Nitrogen	
Polychlorinated biphenyls	
Sedimentation/Siltation	
Toxaphene	
Toxicity	
Calleguas Creek Reach 5 (was Beardsley Channel on 1998 303d list)	
ChemA	146
Chlordane	147
Chlorpyrifos	148
DDT	. 149
Dacthal	. 150
Dieldrin	. 151
Endosulfan	
Nitrogen	
Polychlorinated biphenyls	
Sedimentation/Siltation	
Toxaphene	
Toxicity	
Calleguas Creek Reach 6 ( was Arroyo Las Posas Reaches 1 and 2 on 1998 303d list)	
Ammonia	
DDT	
Nitrate and Nitrite	
Nitrate as Nitrate (NO3)	
Sedimentation/Siltation	
Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on 1998 303d list)	
Ammonia	
Organophosphorus Pesticides	
Sedimentation/Siltation	
Calleguas Creek Reach 8 (was Tapo Canyon Reach 1)	
Sedimentation/Siltation	. 16/

Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1	
on 1998 303d list)	
ChemA	
Chlordane	
DDT	
Dieldrin	173
Endosulfan	175
Hexachlorocyclohexane	176
Nitrate as Nitrate (NO3)	178
Nitrogen, Nitrate	180
Polychlorinated biphenyls	
Toxaphene	183
Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2	
on 1998 303d list)	185
Ammonia	
ChemA	
DDT	
Endosulfan	
Toxaphene	
Toxicity	
Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo Crk	130
Reaches 2 & 3, and lower Conejo Crk/Arroyo Conejo N Fk on 1998 303d list)	101
Ammonia	
ChemA	
DDT	
Endosulfan	
Nitrogen, Nitrite	
Toxaphene	
Toxicity	
Calleguas Creek Reach 11 (Arroyo Santa Rosa, was part of Conejo Creek Reach	
on 1998 303d list)	
Ammonia	
ChemA	
DDT	
Endosulfan	202
Sedimentation/Siltation	203
Toxaphene	204
Toxicity	205
Calleguas Creek Reach 12 (was Conejo Creek/Arroyo Conejo North Fork	
on 1998 303d list)	206
Ammonia	
Chlordane	207
DDT	
Calleguas Creek Reach 13 (Conejo Creek South Fork, was Conejo Cr Reach 4	
and part of Reach 3 on 1998 303d list)	209
Ammonia	
ChemA	
DDT	
Endosulfan	
Toxaphene	
Toxicity	
I OAIOILY	4 14

Carbon Beach	215
Indicator Bacteria	215
Castlerock Beach	216
Indicator Bacteria	216
Compton Creek	217
Copper	217
Lead	218
pH	219
Coyote Creek	220
Ámmonia	220
Dan Blocker Memorial (Coral) Beach	222
Coliform Bacteria	
Dockweiler Beach	223
Indicator Bacteria	
Dry Canyon Creek	
Selenium	
Duck Pond Agricultural Drains/Mugu Drain/Oxnard Drain No 2	
ChemA	
Chlordane	_
DDT	
Nitrogen	
Sediment Toxicity	
Toxaphene	
Toxicity	
Escondido Beach	
Indicator Bacteria	
Flat Rock Point Beach Area	
Indicator Bacteria	
Fox Barranca (tributary to Calleguas Creek Reach 6)	
Nitrate and Nitrite	
Hermosa Beach	
Indicator Bacteria	
Inspiration Point Beach	
Indicator Bacteria	
La Costa Beach	
Indicator Bacteria	241
Las Flores Beach	
Coliform Bacteria	
Las Tunas Beach	
Indicator Bacteria	
Las Virgenes Creek	
Coliform Bacteria	
Leo Carillo Beach (South of County Line)	
Coliform Bacteria	245
Lindero Creek Reach 1	246
Coliform Bacteria	246
Lindero Creek Reach 2 (Above Lake)	247
Coliform Bacteria	247
Long Point Beach	248
Coliform Bacteria	248

Los Angeles Harbor - Inner Cabrillo Beach Area	
Indicator Bacteria	
Los Angeles River Reach 1 (Estuary to Carson Street)	
Ammonia	
Copper	
Lead	
Nutrients (Algae)	255
Zinc	
pH	
Los Angeles River Reach 2 (Carson to Figueroa Street)	259
Ammonia	259
Lead	
Nutrients (Algae)	261
Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	
Ammonia	
Nutrients (Algae)	263
Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)	
Ammonia	
Lead	
Nutrients	
Los Angeles River Reach 5 ( within Sepulveda Basin)	
Ammonia	
Nutrients (Algae)	
Lunada Bay Beach	
Indicator Bacteria	
Malaga Cove Beach	
Indicator Bacteria	
Malibu Beach	
Indicator Bacteria	
Malibu Creek	
Coliform Bacteria	
Malibu Lagoon	
Coliform Bacteria	
Malibu Lagoon Beach (Surfrider)	
Coliform Bacteria	
Manhattan Beach	277
Indicator Bacteria	
Marina del Rey Harbor - Back Basins	
Chlordane	279
Copper	280
DDT	281
Dieldrin	
Fish Consumption Advisory	286
Indicator Bacteria	
Lead	288
Marina del Rey Harbor - Back Basins	
Polychlorinated biphenyls	
Sediment Toxicity	
Zinc	
Marina del Rey Harbor Beach	
Indicator Bacteria	

McCoy Canyon Creek	296
Selenium	296
McGrath Beach	297
Coliform Bacteria	297
Medea Creek Reach 1 (Lake to Confl. with Lindero)	298
Coliform Bacteria	
Medea Creek Reach 2 (Abv Confl. with Lindero)	299
Coliform Bacteria	
Monrovia Canyon Creek	
Lead	
Nicholas Canyon Beach	301
Indicator Bacteria	
Palo Comado Creek	
Coliform Bacteria	
Palo Verde Shoreline Park Beach	
Pathogens	
Paradise Cove Beach	
Fecal Coliform	
Point Dume Beach	
Indicator Bacteria	
Point Fermin Park Beach	
Total Coliform	
Point Vicente Beach	
Indicator Bacteria	
Portuguese Bend Beach	
Indicator Bacteria	
Promenade Park Beach	
Indicator Bacteria	
Puerco Beach	
Indicator Bacteria	
Redondo Beach	
Coliform Bacteria	
Resort Point Beach	
Indicator Bacteria	
Rio Hondo Reach 1 (Confl. LA River to Snt Ana Fwy)	
Copper	
Lead	
Zinc	
pH	
Royal Palms Beach	
Indicator Bacteria	
San Gabriel River, East Fork	
Trash	
San Jose Creek Reach 1 (SG Confluence to Temple St.)	
Ammonia	
Santa Clara River Reach 3 (Freeman Diversion to A Street)	
Ammonia	
Chloride	
Santa Clara River Reach 5 (Blue Cut gaging station to West Pier Hwy 99 Bridge) (was	JZ3
	330
named Santa Clara River Reach 7 on 2002 303(d) lists)	
Gilloride	330

Santa Clara River Reach 6 (W Pier Hwy 99 to Bouquet Cyn Rd) (was named Santa Clara River Reach 8 on 2002 303(d) lists)	333
Chloride	
Santa Monica Beach	
Indicator Bacteria	
Santa Monica Canyon	
Indicator Bacteria	
Sea Level Beach	
Indicator Bacteria	
Stokes Creek	
Coliform Bacteria	
Surfers Point at Seaside	
Indicator Bacteria	
Topanga Beach	
Coliform Bacteria	
Torrance Beach	
Coliform Bacteria	
Torrey Canyon Creek	
Nitrate and Nitrite	
Trancas Beach (Broad Beach)	
Fecal Coliform	
Tujunga Wash (LA River to Hansen Dam)	
Ammonia	
Copper	
Venice Beach	
Indicator Bacteria	
Wheeler Canyon/Todd Barranca	
Nitrate and Nitrite	
Whites Point Beach	347
Indicator Bacteria	347
Will Rogers Beach	349
Indicator Bacteria	349
Zuma Beach (Westward Beach)	351
Indicator Bacteria	351
DELISTING RECOMMENDATIONS	352
Arroyo Seco Reach 2 (Figueroa St. to Riverside Dr.)	
Excess Algal Growth	
Ashland Avenue Drain	
Coliform Bacteria	
Organic Enrichment/Low Dissolved Oxygen	
Ashland Avenue Drain	
Toxicity	
Ballona Creek	
ChemA	
Chlordane	
DDT	
Dieldrin	
Lead	
PCBs (dioxin-like)	
Sediment Toxicity	

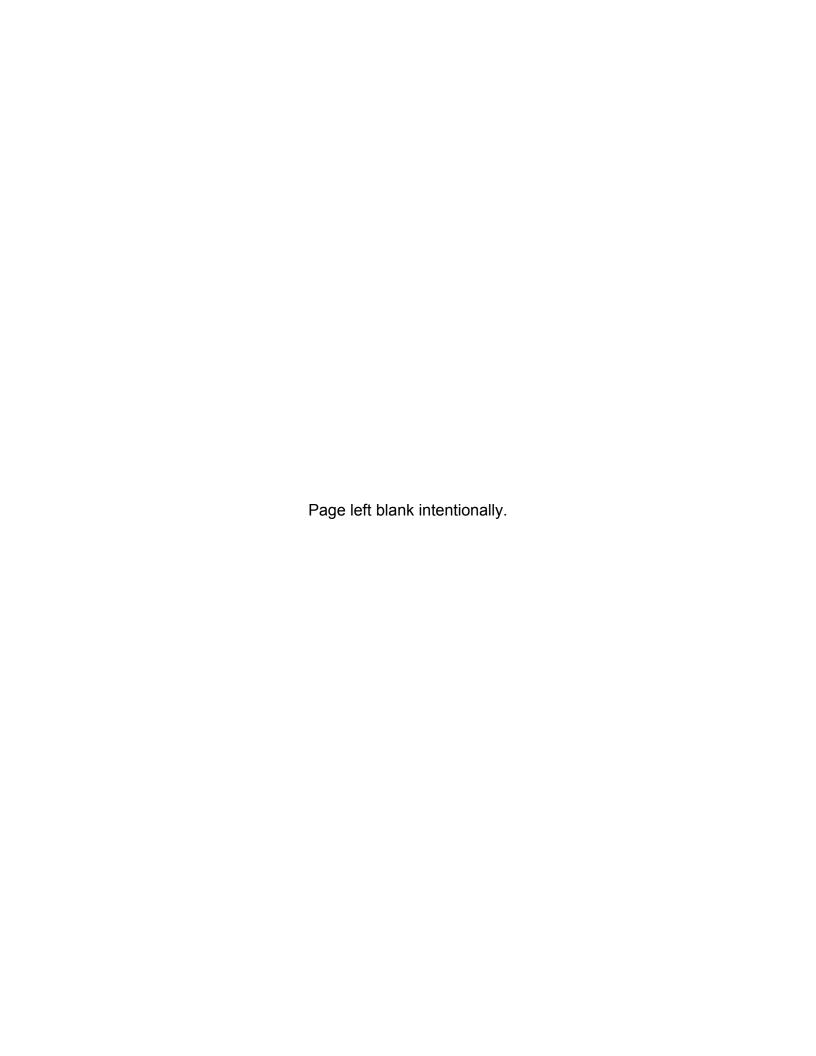
Selenium	371
Zinc	374
Bluff Cove Beach	377
Beach Closures	377
Burbank Western Channel	378
Ammonia	378
Calleguas Creek Reach 1 (was Mugu Lagoon on 1998 303(d) list)	381
Zinc	
Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on	
1998 303d list)	383
Excess Algal Growth	
Nitrogen, Nitrite	
Coyote Creek	
Excess Algal Growth	
Lead	
Nitrogen, Nitrite	
Zinc	
Dominguez Channel (lined portion above Vermont Ave)	
Aldrin	
ChemA	
Chlordane	
Chromium (total)	
DDT	
Polychlorinated biphenyls (PCBs)	
Polycyclic Aromatic Hydrocarbons (PAHs)	
Dominguez Channel Estuary (unlined portion below Vermont Ave)	
Aldrin	
ChemA	
Chromium (total)	
Los Angeles Harbor - Inner Cabrillo Beach Area	405 405
Beach Closures	
Los Angeles River Reach 1 (Estuary to Carson Street)	
Aluminum	
Scum/Foam-unnatural	
Los Angeles River Reach 2 (Carson to Figueroa Street)	
Taste and odor	
Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	
Scum/Foam-unnatural	
Taste and odor	
Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)	
Scum/Foam-unnatural	
Taste and odor	
Los Angeles River Reach 5 ( within Sepulveda Basin)	
Scum/Foam-unnatural	
Taste and odor	
Los Angeles/Long Beach Inner Harbor	
Copper	
Polycyclic Aromatic Hydrocarbons (PAHs)	410 117
Zinc	
Los Angeles/Long Beach Outer Harbor (inside breakwater)	
Polycyclic Aromatic Hydrocarbons (PAHs)	
i diyoyolic Atomatic riyurocarbons (FALIS)	4∠3

Pico Kenter Drain	425
Ammonia	425
Coliform Bacteria	426
Copper	427
Lead	
Polycyclic Aromatic Hydrocarbons (PAHs)	
Toxicity	
Trash	
Viruses (enteric)	
San Gabriel River Reach 2 (Firestone to Whittier Narrows Dam	
Copper	
Zinc	
San Gabriel River Reach 3 (Whittier Narrows to Ramona)	
Toxicity	
Santa Clara River Reach 5 (Blue Cut gaging station to West Pier Hwy 99 Bridge) (was	
named Santa Clara River Reach 7 on 2002 303(d) lists)	
Nitrate and Nitrite	
Santa Monica Bay Offshore/Nearshore	
Chlordane	
Polycyclic Aromatic Hydrocarbons (PAHs)	
- y - y	
ORIGINAL FACT SHEETS	447
LISTING RECOMMENDATIONS	448
Aliso Canyon Wash	449
Copper	449
Ballona Creek	451
Cyanide	451
Calleguas Creek Reach 3 (Potrero Road upstream to confluence with Conejo Creek o	'n
1998 303d list)	453
Chlordane	453
DDT	455
Dieldrin	457
Toxaphene	459
Coyote Creek	
Ďiazinon	461
pH	463
Dominguez Channel Estuary (unlined portion below Vermont Ave)	465
Benzo(a)pyrene (PAHs)	465
Chrysene (C1-C4)	
Phenanthrene	471
Polychlorinated biphenyls	474
Pyrene	
Laké Lindero	
Selenium	480
Los Angeles Harbor - Cabrillo Marina	482
DDT	
Polychlorinated biphenyls	483
Los Angeles Harbor - Fish Harbor	
Chlordane	485

Los Angeles Harbor - Inner Cabrillo Beach Area	487
Copper	487
Los Angeles River Reach 1 (Estuary to Carson Street)	489
Cyanide	489
Diazinon	
Los Cerritos Channel	
Bis(2ethylhexyl)phthalate	
Malibu Creek	
Selenium	
Sulfates	
Piru Creek (from gaging station below Santa Felicia Dam to headwaters)	
Chloride	
Port Hueneme Pier	
Polychlorinated biphenyls	
San Gabriel River Reach 1 (Estuary to Firestone)	
<u>p</u> H	
Toxicity	505
Santa Clara River Reach 11 (Piru Creek, from confluence with Santa Clara River	
Reach 4 to gaging station below Santa Felicia Dam)	
Boron	
Sulfates	
Santa Clara River Reach 6 (W Pier Hwy 99 to Bouquet Cyn Rd) (was named Sant	a 544
Clara River Reach 8 on 2002 303(d) lists)	
Diazinon	
Toxicity	
Sawpit Creek	
Bis(2ethylhexyl)phthalate	
Ventura Marina Jetties	
DDT	
Polychlorinated biphenyls	
•	
Delisting Recommendations	523
Arroyo Seco Reach 1 (LA River to West Holly Ave.)	
Excess Algal Growth	
Ballona Creek	
pH	
Burbank Western Channel	
Cadmium	
Excess Algal Growth	
Scum/Foam-unnatural	
Taste and odor	
Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Ce	
Avenue on 1998 303d list)	
Excess Algal Growth	
Calleguas Creek Reach 5 (was Beardsley Channel on 1998 303d list)	
Excess Algal Growth	536
Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2	EOZ
on 1998 303d list) Excess Algal Growth	
Excess Algal Growth	
EA0000 / Algai Olowii	

Excess Algal Growth	
Calleguas Creek Reach 13 (Conejo Creek South Fork, was Conejo Cr Reach 4	
and part of Reach 3 on 1998 303d list)	
Excess Algal Growth	
Carbon Beach	
Beach Closures	
Coyote Creek	
Abnormal Fish Histology (Lesions)	
Selenium	
Dockweiler Beach	
Beach Closures	
Dominguez Channel Estuary (unlined portion below Vermont Ave)	
Polycyclic Aromatic Hydrocarbons (PAHs)	
Escondido Beach	
Beach Closures	
Flat Rock Point Beach Area	
Beach Closures	
Inspiration Point Beach	
Beach Closures	
La Costa Beach	
Beach Closures	
Las Tunas Beach	
Beach Closures	
Los Angeles Harbor - Consolidated Slip	
Nickel	
Polycyclic Aromatic Hydrocarbons (PAHs)	
Los Angeles River Reach 1 (Estuary to Carson Street)  Cadmium	
Los Angeles River Reach 2 (Carson to Figueroa Street)	
Scum/Foam-unnatural	
Lunada Bay Beach	
Beach Closures	
Malibu Lagoon Beach (Surfrider)	
Beach Closures	
Ormond Beach	
Indicator Bacteria	
Point Dume Beach	
Beach Closures	
Point Vicente Beach	
Beach Closures	
Resort Point Beach	
Beach Closures	
Beach Closures	
San Buenaventura Beach	
Indicator Bacteria	
San Gabriel River Estuary	
Abnormal Fish Histology (Lesions)	

Excess Algal Growth	582
Toxicity	
San Jose Creek Reach 1 (SG Confluence to Temple St.)	
Excess Algal Growth	
San Jose Creek Reach 2 (Temple to I-10 at White Ave.)	588
Excess Algal Growth	
Sea Level Beach	589
Beach Closures	589
Topanga Beach	590
Beach Closures	590
Torrance Beach	591
Beach Closures	591
Trancas Beach (Broad Beach)	592
Beach Closures	
Tujunga Wash (LA River to Hansen Dam)	593
Scum/Foam-unnatural	
Taste and odor	
Ventura River Estuary	
Fecal Coliform	
Verdugo Wash Reach 1 (LA River to Verdugo Rd.)	
Excess Algal Growth	
Verdugo Wash Reach 2 (Above Verdugo Road)	
Excess Algal Growth	
Zuma Beach (Westward Beach)	
Beach Closures	599
AREA CHANGE RECOMMENDATIONS	600
Dominguez Channel (lined portion above Vermont Ave)	
Dominguez Channel Estuary (unlined portion below Vermont Ave)	
Los Angeles Harbor - Cabrillo Marina	
Los Angeles Harbor - Consolidated Slip	
Los Angeles Harbor - Fish Harbor	
Los Angeles Harbor - Inner Cabrillo Beach Area	
Los Angeles/Long Beach Inner Harbor	
Los Angeles/Long Beach Outer Harbor (inside breakwater)	
San Pedro Bay Near/Off Shore Zones	
- <b>,</b>	

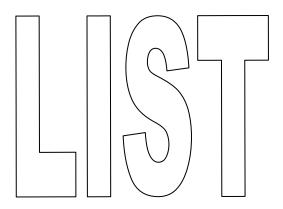


# Los Angeles Region (4)



New or Revised Fact Sheets

# Los Angeles Region (4)



Recommendations to place waters and pollutants on the section 303(d) List

Water Segment: Aliso Canyon Wash

Pollutant: Fecal Coliform

Decision: List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under section 3.3 the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.3 the site exceeds the fecal coliform water quality objective for the protection of REC-1 beneficial uses.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Six of six samples exceeded the Basin Plan WQOs for fecal coliform bacteria to protect REC-1 beneficial uses, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
- 4. The REC-1 beneficial uses are being impacted in this water body by bacteriological pollutants.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

Los Angeles RWQCB Basin Plan Amendment to Revise Bacteria Objectives for Waters Designated for Water Contact Recreation: fecal coliform density 200/100 ml 30-day geometric mean, 400/100 ml single

sample limit.

Data Used to Assess

Water Quality:

Six of 6 fecal coliform samples exceeded the single sample limit

(LACDPW, 2003a).

**Spatial Representation:** "Aliso Creek" Tributary Monitoring Station (TS01) is located at the

southeast corner of the bridge on Saticoy over Aliso Canyon Wash in

Reseda, California.

Temporal Representation: Five samples taken during the wet season (11/08/2002 - 3/15/2003) and

one sample taken during the dry season (4/30/2003).

Data Quality Assessment: QA/QC used by the Los Angeles County Department of Public Works -

Evaluation of Analytes and QA/QC Specifications for Monitoring Program

(Woodward-Clyde Consultants, 1996).

Water Segment: Burbank Western Channel

Pollutant: Cyanide

**Decision:** List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Two samples exceeded the CTR Criteria Continuous Concentration of 0.0052 mg/L which is the highest concentration of cyanide to which aquatic life can be exposed for an extended period of time (four days) without deleterious effects applicable to protect aquatic life BUs.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Two of six samples exceeded the CTR Criteria Continuous Concentration of 0.0052 mg/L for cyanide and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: CTR Criteria Continuous Concentration of 0.0052 mg/L is the highest concentration of cyanide to which aquatic life can be exposed for an extended period of time (four days) without deleterious effects applicable to protect aquatic life BUs.

Water Quality:

Two out of six samples exceeded the CTR Criteria Continuous Concentration guideline for the protection of aquatic life (LACDPW,

2003a).

**Spatial Representation:** One sample site.

Temporal Representation: Six monthly samples, five (5) taken during the wet season (11/08/2002-

03/15/2003) and one (1) sample taken during the dry season

(04/30/2003).

Data Quality Assessment: Evaluation of Analytes and QA/QC Specifications for Monitoring Program

(Woodward-Clyde, 1996) Los Angeles County Department of Public

Works.

Water Segment: Compton Creek

Pollutant: Trash

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under

section 3.11 of the Listing Policy. Under section 3.11, listing may be proposed based on the situation-specific weight of evidence.

Three lines of evidence are available in the administrative record to assess this

pollutant. The first line of evidence is data on the tonnage of trash collected by Los Angeles County Department of Public Works between 2002 and 2005. The second line of evidence is tonnage of trash collected by volunteers during these same years on Earth Day and Coastal Clean Up Day, and the third line of evidence is photographic evidence showing large amounts of trash in this water body.

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

This conclusion is based on the staff findings that:

- 1. Data hand information has been evaluated that supports this decision.
- 2. The trash data over a period of four years exceeded the narrative objective in the water body for protection of aquatic life and contact and noncontact recreational beneficial uses.
- 3. Pursuant to section 3.11 of the Listing Policy, there is no additional information showing that standards are being met.

SWRCB Staff Recommendation:

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

#### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R2 - Non-Contact Recreation

Matrix: -N/A

Water Quality Objective/ Water Quality Criterion: From the Los Angeles RWQCB Basin Plan: Waters shall not contain floating materials, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.

Water Quality:

Los Angeles County Department of Public Works removed 135.18 tons of trash from Compton Creek between July of 2002 and October of 2005

(Heal the Bay, 2006).

**Spatial Representation:** Compton Creek.

Temporal Representation: Trash removed between July of 2002 and October of 2005.

**Data Quality Assessment:** Los Angeles County Department of Public Works.

Numeric Line of Evidence Pollutant-Nuisance

Beneficial Use: R2 - Non-Contact Recreation

Matrix: -N/A

Water Quality Objective/ Water Quality Criterion:

From the Los Angeles RWQCB Basin Plan: Waters shall not contain floating materials, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.

**Data Used to Assess** 

Water Quality:

Volunteers removed 26.5 tons of trash from Compton Creek on Coastal Clean Up Days and Earth Days between 2002 and 2005 (Heal the Bay.

2006).

**Spatial Representation:** Compton Creek.

Temporal Representation: Coastal Clean Up Day (September 21, 2002; September 20, 2003;

September 18, 2004; September 17, 2005) and Earth Day (April 1, 2003;

April 17, 2004; April 30, 2005).

Data Quality Assessment: Heal the Bay.

Line of Evidence Visual

Beneficial Use R2 - Non-Contact Recreation

Non-Numeric Objective: From the Los Angeles RWQCB Basin Plan: Waters shall not contain

floating materials, including solids, liquids, foams, and scum, in

concentrations that cause nuisance or adversely affect beneficial uses.

**Data Used to Assess** 

Water Quality:

Photos showing large amounts of trash throughout Compton Creek. Heal the Bay states that they have been the Los Angeles County Coordinator for Coastal Clean-Up Day and Earth Day at 15 over 60 locations over the last 15 years. According to Heal the Bay, none of these other locations has ever come close to being as polluted with trash as Compton Creek.

**Spatial Representation:** Various locations throughout Compton Creek.

**Temporal Representation:** Photos taken between 2002 and 2005.

Water Segment: Dominguez Channel (lined portion above Vermont Ave)

Pollutant: Sediment Toxicity

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.6 of the Listing Policy. Under section 3.6 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A sufficient number of the sediment samples show toxicity.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Nineteen of 27 samples show sediment toxicity, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

From the Los Angeles RWQCB's Basin Plan: All waters should be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by the use of indicator organisms, analyses of species diversity, population densities, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board.

Water Quality:

There were 27 sediment samples available and 19 of these show

sediment toxicity (Heal the Bay, 2006).

**Spatial Representation:** Six sites throughout the Dominguez Channel were sampled: (R1)

Anaheim Street, (R3) Alameda Street, (R4) Sepulveda Boulevard, (R5) 223rd Street/Willimington Avenue, (R6) Avalon Boulevard, and (R7) Main

Street.

Temporal Representation: Samples were taken between August 2000 and April 2004.

Data Quality Assessment: Data collected for NPDES Permit No. CA003778 (Shell Oil Products US,

Los Angeles Refinery).

Water Segment: Dominguez Channel Estuary (unlined portion below Vermont Ave)

Pollutant: Benzo[a]anthracene

**Decision:** List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under section 3.9 of the Listing Policy. Under section 3.9 two lines of evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. A sufficient number of samples exceeded the sediment quality guideline. Although sediment toxicity has been observed it is not enough to establish a sufficiently strong association with the sediment pollutant concentration. However, significant benthic degradation has been recorded and this may be linked with this pollutant concentration in this water body segment.

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

This conclusion is based on the staff findings that:

- 1. Data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Eight of 41 samples exceeded the sediment quality guideline. These data exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Based on section 3.9 of the Listing Policy significant benthic impact has been documented and the pollutant in sediment may be linked to the observed impacts.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.

# SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use

**Evaluation Guideline:** A sediment quality guideline of 692.53 ng/g was used (MacDonald et al.,

1996).

**Data Used to Assess** 

Water Quality:

Of 41 sediment core samples, 8 exceeded the sediment quality guideline.

**Spatial Representation:** Forty-one samples are spread throughout the water body.

**Temporal Representation:** The samples were collected in 2002.

Data Quality Assessment: Quality assurance is described in the Contaminated Sediments Task

Force Database.

Numeric Line of Evidence Toxicity

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: All waters should be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological response in, human, plant, animal, or aquatic

life.

**Evaluation Guideline:** Samples were considered toxic if (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant

difference value.

**Data Used to Assess** 

Water Quality:

One toxicity sample that showed 61 percent survival which is considered

toxic (Anderson et al., 1998).

**Spatial Representation:** One station at H. Ford Bridge (BPTCP station 47010.0).

**Temporal Representation:** The sample was collected in 1996.

**Data Quality Assessment:** Bay Protection and Toxic Cleanup Program.

**Numeric Line of Evidence** Population/Community Degradation

**Beneficial Use:** ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** Evaluation of the benthic data were completed using the approaches

developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the

benthic community (Anderson et al., 1998).

Data Used to Assess

Water Quality:

One benthic community sample with a benthic index of 0.21 (Anderson et

al., 1998).

**Spatial Representation:** One station at H. Ford Bridge (BPTCP station 47010.0).

**Temporal Representation:** The sample was collected in 1996.

Environmental Adjacent waters (Consolidated Slip) also has degraded benthic

**Conditions:** communities.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program (Stephenson et al., 1994).

Water Segment: Echo Park Lake

Pollutant: Trash

**Decision:** List

Weight of Evidence: This pollutant is being considered for listing under section 3.11 of the Listing

Policy. Under section 3.11, a minimum of one line of evidence is needed to

assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL was developed and approved by USEPA and an approved implementation plan was expected to result in attainment of the standard. However, on July 19, 2006 the State Board rescinded approval of the TMDL and remanded it back to the Regional

Board.

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

Limited Segments category.

SWRCB Staff Recommendation:

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

pollutant contributes to or causes the problem.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation

Information Used to Assess Water Quality:

The LA Rivers Trash TMDL was developed and approved by USEPA and an approved implementation plan was expected to result in attainment of

the standard. However, on July 19, 2006 the State Board rescinded

approval of the TMDL and remanded it the Regional Board.

Water Segment: Lincoln Park Lake

Pollutant: Trash

**Decision:** List

Weight of Evidence: This pollutant is being considered for listing under section 3.11 of the Listing

Policy. Under section 3.11, a minimum of one line of evidence is needed to

assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL was developed and approved by USEPA and an approved implementation plan was expected to result in attainment of the standard. However, on July 19, 2006 the State Board rescinded approval of the TMDL and remanded it back to the Regional

Board.

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

Limited Segments category.

SWRCB Staff Recommendation:

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

pollutant contributes to or causes the problem.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation

Information Used to Assess Water Quality:

The Los Angeles River TMDL was developed and approved by USEPA and an approved implementation plan was expected to result in

attainment of the standard. However, on July 19, 2006 the State Board rescinded approval of the TMDL and remanded it the Regional Board

(SWRCB, 2003).

Water Segment: Los Angeles Harbor - Fish Harbor

Pollutant: Benzo[a]anthracene

Decision: List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 two lines of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Also, sediment toxicity in a sufficient number of samples exceeded the sediment quality guideline. Under section 3.6 documented pollutant exceedances in sediment must be associated with observed toxicity before listing can occur.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Eight of 12 samples exceeded the 692.53 ng/L sediment quality guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. Also, three of 7 sediment toxicity samples were considered toxic. Section 3.6 of the Listing Policy requires that the pollutant in sediment be linked to observed significant toxicity before placing a water segment on the 303(d) list. The Listing Policy requires evidence of observed toxicity to establish a connection between the pollutant in the sediment and toxicity impacts to the aguatic habitat in the water body segment.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

# SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** A sediment quality guideline of 692.53 ng/g was used (MacDonald et al.,

1996).

**Data Used to Assess** 

Water Quality:

Of the 12 sediment core and grab samples, 8 measurements exceeded

the sediment quality guideline (CSTF, 2002).

**Spatial Representation:** The samples were spread throughout the water body.

Temporal Representation: Samples were collected in 1992 and 1999.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program QAPP.

Quality assurance for other samples presented in the Contaminated

Sediments Task Force Database.

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** Samples were considered toxic if (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant

difference value.

**Data Used to Assess** 

Water Quality:

Overall, three of seven samples were toxic. This total was created from two different sediment studies within Fish Harbor. In one study, three of six samples were toxic (BPTCP). In the other, none of one sample was

toxic (Bight, 1998) (LARWQCB & CCC, 2004).

**Spatial Representation:** Seven sites were sampled throughout LA/LB Fish Harbor.

Temporal Representation: Samples were collected in 1992, 1997 and 1998.

**Data Quality Assessment:** Contaminated Sediment Task Force (2005) and references therein

Water Segment: Los Angeles Harbor - Fish Harbor

Pollutant: Chrysene (C1-C4)

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.6 of the Listing Policy. Under section 3.6 two lines of evidence

are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Sediment toxicity is observed and a sufficient number of samples exceeded the sediment quality guideline. Under section 3.6 documented pollutant exceedances in sediment must be associated with observed toxicity before listing can occur.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Nine of 12 samples exceeded the 845.98 ng/L Chrysene (C1-C4) sediment quality guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. Also 3 of 7 sediment toxicity samples were considered toxic. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/
Water Quality Criterion:

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** A sediment quality guideline of 845.98 ng/g was used (MacDonald et al.,

1996).

Water Quality:

Of the 12 sediment core and grab samples, 9 measurements exceeded

the sediment quality guideline (CSTF, 2002).

**Spatial Representation:** The samples were spread throughout the water body.

Temporal Representation: Samples were collected in 1992 and 1999.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program QAPP.

Quality assurance for other samples presented in the Contaminated

Sediments Task Force Database.

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** Samples were considered toxic if (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant

difference value.

**Data Used to Assess** 

Water Quality:

Overall, three of seven samples were toxic. This total was created from two different sediment studies within Fish Harbor. In one study, three of

six samples were toxic (BPTCP). In the other, none of one sample was

toxic (Bight, 1998) (LARWQCB & CCC, 2004).

**Spatial Representation:** Seven sites were sampled throughout LA/LB Fish Harbor.

Temporal Representation: Samples were collected in 1992, 1997 and 1998.

Data Quality Assessment: Contaminated Sediment Task Force (2005) and references therein

Water Segment: Los Angeles Harbor - Fish Harbor

Pollutant: Copper

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.6 of the Listing Policy. Under section 3.6 two lines of evidence

are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Sediment toxicity is observed and a sufficient number of samples exceeded the sediment quality guideline. Under section 3.6 documented pollutant exceedances in sediment must be associated with observed toxicity before listing can occur.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Ten of 10 samples exceeded the 270  $\mu$ g/g copper ERM sediment quality guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. Three of 7 sediment toxicity samples were considered toxic. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/
Water Quality Criterion:

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** An Effects Range-Median of 270 μg/g was used (Long et al., 1995).

Water Quality:

Of the 10 sediment core and grab samples, all measurements exceeded

sediment quality guideline (CSTF, 2002).

**Spatial Representation:** The samples were spread throughout the water body.

Temporal Representation: Samples were collected in 1992 and 1999.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program QAPP.

Quality assurance for other samples presented in the Contaminated

Sediments Task Force Database.

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** Samples were considered toxic if (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant

difference value.

Data Used to Assess

Water Quality:

Overall, three of seven samples were toxic. This total was created from two different sediment studies within Fish Harbor. In one study, three of

six samples were toxic (BPTCP). In the other, none of one sample was

toxic (Bight, 1998) (LARWQCB & CCC, 2004).

**Spatial Representation:** Seven sites were sampled throughout LA/LB Fish Harbor.

Temporal Representation: Samples were collected in 1992, 1997 and 1998.

Data Quality Assessment: Contaminated Sediment Task Force (2005) and references therein

Water Segment: Los Angeles Harbor - Fish Harbor

Pollutant: Dibenz[a,h]anthracene

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.6 of the Listing Policy. Under section 3.6 two lines of evidence

are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Sediment toxicity is observed and a sufficient number of samples exceeded the sediment quality guideline. Under section 3.6 documented pollutant exceedances in sediment must be associated with observed toxicity before listing can occur.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Four of 12 samples exceeded the 260 ng/g Dibenz[a,h]anthracene sediment quality guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. Also, 3 of 7 sediment toxicity samples were considered toxic. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

#### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** A sediment quality guideline of 260 ng/g was used (Long et al., 1995).

Water Quality:

Of the 12 sediment core and grab samples, 4 measurements exceeded

the sediment quality guideline (CSTF, 2002).

**Spatial Representation:** The samples were spread throughout the water body.

Temporal Representation: Samples were collected in 1992 and 1999.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program QAPP.

Quality assurance for other samples presented in the Contaminated

Sediments Task Force Database.

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** Samples were considered toxic if (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant

difference value.

**Data Used to Assess** 

Water Quality:

Overall, three of seven samples were toxic. This total was created from two different sediment studies within Fish Harbor. In one study, three of six complex were toxic (RDTCD). In the other page of one complex were

six samples were toxic (BPTCP). In the other, none of one sample was

toxic (Bight, 1998) (LARWQCB & CCC, 2004).

**Spatial Representation:** Seven sites were sampled throughout LA/LB Fish Harbor.

Temporal Representation: Samples were collected in 1992, 1997 and 1998.

Data Quality Assessment: Contaminated Sediment Task Force (2005) and references therein

Water Segment: Los Angeles Harbor - Fish Harbor

Pollutant: Lead

Decision: List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 two lines of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Sediment toxicity is significant and a sufficient number of samples exceeded the sediment quality guideline. Under section 3.6 documented pollutant exceedances in sediment must be associated with observed toxicity before listing can occur.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Eight of 10 samples exceeded the 112.18  $\mu$ g/g Lead sediment quality guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. Additionally, three of seven samples were toxic. Section 3.6 of the Listing Policy requires that the pollutant in sediment be linked to observed significant toxicity before placing a water segment on the 303(d) list. The Listing Policy requires evidence of observed toxicity to establish a connection between the pollutant in the sediment and toxicity impacts to the aquatic habitat in the water body segment.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

# SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** A sediment quality guideline of 112.18 μg/g was used (MacDonald et al.,

1996).

**Data Used to Assess** 

Water Quality:

Of the 10 sediment core and grab samples, 8 measurements exceeded

the sediment quality guideline (CSTF, 2002).

**Spatial Representation:** The samples were spread throughout the water body.

Temporal Representation: Samples were collected in 1992 and 1999.

**Data Quality Assessment:** Bay Protection and Toxic Cleanup Program QAPP.

Quality assurance for other samples presented in the Contaminated

Sediments Task Force Database.

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** Samples were considered toxic if (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant

difference value.

**Data Used to Assess** 

Water Quality:

Overall, three of seven samples were toxic. This total was created from two different sediment studies within Fish Harbor. In one study, three of six samples were toxic (BPTCP). In the other, none of one sample was

toxic (Bight, 1998) (LARWQCB & CCC, 2004).

**Spatial Representation:** Seven sites were sampled throughout LA/LB Fish Harbor.

**Temporal Representation:** Samples were collected in 1992, 1997 and 1998.

**Data Quality Assessment:** Contaminated Sediment Task Force (2005) and references therein

Water Segment: Los Angeles Harbor - Fish Harbor

Pollutant: Mercury

Decision: List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 two lines of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. There is significant sediment toxicity and a sufficient number of samples exceeded the sediment quality guideline. Under section 3.6 documented pollutant exceedances in sediment must be associated with observed toxicity before listing can occur.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Seven of 10 samples exceeded the 2.1  $\mu$ g/g mercury sediment quality guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. Additionally, three of 7 sediment toxicity samples were considered toxic. Section 3.6 of the Listing Policy requires that the pollutant in sediment be linked to observed toxicity before placing a water segment on the 303(d) list. The Listing Policy requires evidence of observed toxicity to establish a connection between the pollutant in the sediment and toxicity impacts to the aquatic habitat in the water body segment.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

# SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of EvidencePollutant-SedimentBeneficial Use:MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** A sediment quality guideline of 2.1 μg/g was used (PTI Environmental

Services, 1991).

**Data Used to Assess** 

Water Quality:

Of the 10 sediment core and grab samples, 7 exceeded sediment quality

guideline (CSTF, 2002).

**Spatial Representation:** The samples were spread throughout the water body.

Temporal Representation: Samples were collected in 1992 and 1999.

**Data Quality Assessment:** Bay Protection and Toxic Cleanup Program QAPP.

Quality assurance for other samples presented in the Contaminated

Sediments Task Force Database.

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** Samples were considered toxic if (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant

difference value.

**Data Used to Assess** 

Water Quality:

Overall, three of seven samples were toxic. This total was created from two different sediment studies within Fish Harbor. In one study, three of six samples were toxic (BPTCP). In the other, none of one sample was

toxic (Bight, 1998) (LARWQCB & CCC, 2004).

**Spatial Representation:** Seven sites were sampled throughout LA/LB Fish Harbor.

Temporal Representation: Samples were collected in 1992, 1997 and 1998.

**Data Quality Assessment:** Contaminated Sediment Task Force (2005) and references therein

Water Segment: Los Angeles Harbor - Fish Harbor

Pollutant: Phenanthrene

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.6 of the Listing Policy. Under section 3.6 two lines of evidence

are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Sediment toxicity is observed and a sufficient number of samples exceeded the sediment quality guideline. Under section 3.6 documented pollutant exceedances in sediment must be associated with observed toxicity

before listing can occur.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Six of 12 samples exceeded the 543.53 ng/g Phenanthrene sediment quality guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. Also, 3 of 7 sediment toxicity samples were considered toxic.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

#### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** A sediment quality guideline of 543.53 ng/g was used (MacDonald et al.,

1996).

**Data Used to Assess** 

Water Quality:

Of the 12 sediment core and grab samples, 6 measurements exceeded

the sediment quality guideline (CSTF, 2002).

**Spatial Representation:** The samples were spread throughout the water body.

Temporal Representation: Samples were collected in 1992 and 1999.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program QAPP.

Quality assurance for other samples presented in the Contaminated

Sediments Task Force Database.

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/

Water Quality Criterion:

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** Samples were considered toxic if (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant

difference value.

**Data Used to Assess** 

Water Quality:

Overall, three of seven samples were toxic. This total was created from two different sediment studies within Fish Harbor. In one study, three of six samples were toxic (BPTCP). In the other, none of one sample was

toxic (Bight, 1998) (LARWQCB & CCC, 2004).

**Spatial Representation:** Seven sites were sampled throughout LA/LB Fish Harbor.

**Temporal Representation:** Samples were collected in 1992, 1997 and 1998.

Data Quality Assessment: Contaminated Sediment Task Force (2005) and references therein

Water Segment: Los Angeles Harbor - Fish Harbor

Pollutant: Pyrene

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.6 of the Listing Policy. Under section 3.6 two lines of evidence

are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Sediment toxicity is observed and a sufficient number of samples exceeded the sediment quality guideline. Under section 3.6 documented pollutant exceedances in sediment must be associated with observed toxicity before listing can occur.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Ten of 12 samples exceeded the 1,397.4 ng/g Pyrene sediment quality guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. Also, 3 of 7 sediment toxicity samples were considered toxic. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/
Water Quality Criterion:

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** A sediment quality guideline of 1,397.4 ng/g was used (MacDonald et al.,

1996).

**Data Used to Assess** 

Water Quality:

Of the 12 sediment core and grab samples, 10 measurements exceeded

the sediment quality guideline (CSTF, 2002).

**Spatial Representation:** The samples were spread throughout the water body.

Temporal Representation: Samples were collected in 1992 and 1999.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program QAPP.

Quality assurance for other samples presented in the Contaminated

Sediments Task Force Database.

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** Samples were considered toxic if (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant

difference value.

**Data Used to Assess** 

Water Quality:

Overall, three of seven samples were toxic. This total was created from two different sediment studies within Fish Harbor. In one study, three of

six samples were toxic (BPTCP). In the other, none of one sample was

toxic (Bight, 1998) (LARWQCB & CCC, 2004).

**Spatial Representation:** Seven sites were sampled throughout LA/LB Fish Harbor.

Temporal Representation: Samples were collected in 1992, 1997 and 1998.

Data Quality Assessment: Contaminated Sediment Task Force (2005) and references therein

(BPTCP QAPP, Bight 98 QAPP).

Water Segment: Los Angeles Harbor - Fish Harbor

Pollutant: Sediment Toxicity

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.6 of the Listing Policy. Under section 3.6 a water segment can be placed on the 303(d) list if the water segment exhibits significant toxicity and the observed toxicity is associated with a pollutant or pollutants. The

water body segment may also be listed for toxicity alone.

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three of 7 samples exhibited significant amphipod toxicity and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** Samples were considered toxic if (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant

difference value.

**Data Used to Assess** 

Water Quality:

Overall, three of seven samples were toxic. This total was created from two different sediment studies within Fish Harbor. In one study, three of six samples were toxic (BPTCP). In the other, none of one sample was

toxic (Bight, 1998) (LARWQCB & CCC, 2004).

**Spatial Representation:** Seven sites were sampled throughout LA/LB Fish Harbor.

Temporal Representation: Samples were collected in 1992, 1997 and 1998.

Data Quality Assessment: Contaminated Sediment Task Force (2005) and references therein

(BPTCP QAPP, Bight 98 QAPP).

Decision:

Water Segment: Los Angeles Harbor - Fish Harbor

List

Pollutant: Zinc

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 two lines of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Sediment toxicity is significant and a sufficient number of samples exceeded the sediment quality guideline. Under section 3.6 documented pollutant exceedances in sediment must be associated with observed toxicity before listing can occur.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Ten of 10 samples exceeded the 410  $\mu$ g/g sediment quality guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. Additionally, three of 7 sediment toxicity samples were considered toxic. Section 3.6 of the Listing Policy requires that the pollutant in sediment be linked to observed significant toxicity before placing a water segment on the 303(d) list. The Listing Policy requires evidence of observed toxicity to establish a connection between the pollutant in the sediment and toxicity impacts to the aquatic habitat in the water body segment.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

# SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** Samples were considered toxic if (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant

difference value.

Data Used to Assess

Water Quality:

Overall, three of seven samples were toxic. This total was created from two different sediment studies within Fish Harbor. In one study, three of six samples were toxic (BPTCP). In the other, none of one sample was

toxic (Bight, 1998) (LARWQCB & CCC, 2004).

**Spatial Representation:** Seven sites were sampled throughout LA/LB Fish Harbor.

Temporal Representation: Samples were collected in 1992, 1997 and 1998.

Data Quality Assessment: Contaminated Sediment Task Force (2005) and references therein

(BPTCP QAPP, Bight 98 QAPP).

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** A sediment quality guideline of 410 μg/g was used (Long et al., 1995).

Data Used to Assess

Water Quality:

Of the 10 sediment core and grab samples, all of the measurements

exceeded the sediment quality guideline (CSTF, 2002).

**Spatial Representation:** The samples were spread throughout the water body.

Temporal Representation: Samples were collected in 1992 and 1999.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program QAPP.

Quality assurance for other samples presented in the Contaminated

Sediments Task Force Database.

Water Segment: Los Angeles River Estuary (Queensway Bay)

Pollutant: Sediment Toxicity

Decision: List

Weight of Evidence: Toxicity is being considered for listing for under section 3.6 of the Listing

Policy. Under section 3.6 a single line of evidence is necessary to assess

listing status for toxicity.

One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.6, the site does have significant toxicity.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies, with the requirements of section 6.1.3 of the Policy.

2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy

3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

4. Five of the 9 samples were toxic and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

## **Lines of Evidence:**

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat

life.

Matrix: Sediment

Water Quality Objective/
Water Quality Criterion:

Los Angeles RWQCB Basin Plan: All waters should be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological response in, human, plant, animal, or aquatic

**Evaluation Guideline:** Samples were considered toxic if; (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was

less than the threshold based on the 90th percentile minimum significant

difference value.

Data Used to Assess Water Quality:

Overall, five of nine samples were toxic. This total was created from two different sediment studies within Los Angeles River Estuary. Three of 7 samples were toxic (BPTCP). Two of two samples were toxic (Bight, 1998). No samples were collected in 1999 (W-EMAP) (LARWQCB &

CCC, 2004).

**Spatial Representation:** Nine sites were sampled throughout Los Angeles River Estuary.

Temporal Representation: Samples were collected in 1992 thru 1994 and 1998.

Data Quality Assessment: Contaminated Sediment Task Force (2005) and references therein

(BPTCP QAPP, Bight 1998 QAPP).

Water Segment: Los Angeles River Estuary (Queensway Bay)

Pollutant: Trash

**Decision:** List

Weight of Evidence: This pollutant is being considered for listing under section 3.11 of the Listing

Policy. Under section 3.11, a minimum of one line of evidence is needed to

assess listing status.

Multiple lines of evidence are available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL was developed and approved by USEPA and an approved implementation plan was expected to result in attainment of the standard. However, on July 19, 2006 the State Board rescinded approval of the TMDL and remanded it back to the Regional

Board.

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

Limited Segments category.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards for the pollutant are

exceeded.

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: IN - Industrial Service Supply, NA - Navigation

Matrix: Water

Water Quality Objective/

**Water Quality Criterion:** 

Evaluation of applicable narrative water quality objective.

**Data Used to Assess** 

Water Quality:

Sixteen quarterly samples measured the tonnage of trash collected from the estuary. Debris collection ranged from 3,091 to 4,162 tons per year

(Long Beach, 2000).

**Spatial Representation:** One sampling site in the estuary.

Temporal Representation: Quarterly samples taken over four years (1995-1999).

Data Quality Assessment: City of Long Beach, Department of Parks, Recreation and Marine - Storm

**Debris Removal Operations** 

Line of Evidence Visual

Beneficial Use IN - Industrial Service Supply, NA - Navigation

Non-Numeric Objective: Narrative objective evaluated using numeric target of zero trash in

estuary established in Los Angeles River Trash TMDL and other regional

trash TMDLs.

**Data Used to Assess** 

Water Quality:

Photographic documentation shows accumulations of trash along a beach, near a boat mooring location, and in channels near Long Beach

(LARWQCB, 2001).

**Spatial Representation:** Photographs from various points in Los Angeles River estuary including

Belmont Shores, City of Long Beach and Queensway Bay.

Temporal Representation: February 16, 17, 2000 and January 12, 22, 24, 2001.

Line of Evidence Remedial Program in Place

Beneficial Use IN - Industrial Service Supply, NA - Navigation

Information Used to Assess Water Quality:

The Los Angeles River Trash TMDL was completed by the Regional Board on September 19, 2001 (USEPA, 2002) to address impairments caused by trash. However, on July 19, 2006 the State Board rescinded approval of this TMDL and remanded it back to the Regional Board based on court ruling City of Arcadia v. State Water Resources Control

Water Segment: Los Angeles River Reach 1 (Estuary to Carson Street)

Pollutant: Trash

**Decision:** List

Weight of Evidence: This pollutant is being considered for listing under section 3.11 of the Listing

Policy. Under section 3.11, a minimum of one line of evidence is needed to

assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL was developed and approved by USEPA and an approved implementation plan was expected to result in attainment of the standard. However, on July 19, 2006 the State Board rescinded approval of the TMDL and remanded it back to the Regional

Board.

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

Limited Segments category.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section

303(d) list because applicable water quality standards for the pollutant are

exceeded.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation

Information Used to Assess Water Quality:

The Los Angeles River Trash TMDL was completed by the Regional Board on September 19, 2001 (USEPA, 2002) to address impairments caused by trash. However, on July 19, 2006 the State Board rescinded approval of this TMDL and remanded it back to the Regional Board based on court ruling City of Arcadia v. State Water Resources Control

Water Segment: Los Angeles River Reach 2 (Carson to Figueroa Street)

Pollutant: Trash

**Decision:** List

Weight of Evidence: This pollutant is being considered for listing under section 3.11 of the Listing

Policy. Under section 3.11, a minimum of one line of evidence is needed to

assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL was developed and approved by USEPA and an approved implementation plan was expected to result in attainment of the standard. However, on July 19, 2006 the State Board rescinded approval of the TMDL and remanded it back to the Regional

Board.

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

Limited Segments category.

SWRCB Staff Recommendation:

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

pollutant contributes to or causes the problem.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Information Used to Assess Water Quality:

The Los Angeles River Trash TMDL was completed by the Regional Board on September 19, 2001 (USEPA, 2002) to address impairments caused by trash. However, on July 19, 2006 the State Board rescinded approval of this TMDL and remanded it back to the Regional Board based on court ruling City of Arcadia v. State Water Resources Control

Water Segment: Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)

Pollutant: Trash

**Decision:** List

Weight of Evidence: This pollutant is being considered for listing under section 3.11 of the Listing

Policy. Under section 3.11, a minimum of one line of evidence is needed to

assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL was developed and approved by USEPA and an approved implementation plan was expected to result in attainment of the standard. However, on July 19, 2006 the State Board rescinded approval of the TMDL and remanded it back to the Regional

Board.

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

Limited Segments category.

SWRCB Staff Recommendation:

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

pollutant contributes to or causes the problem.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA -

Warm Freshwater Habitat, WI - Wildlife Habitat

Information Used to Assess Water Quality:

The Los Angeles River Trash TMDL was completed by the Regional Board on September 19, 2001 (USEPA, 2002) to address impairments caused by trash. However, on July 19, 2006 the State Board rescinded approval of this TMDL and remanded it back to the Regional Board based on court ruling City of Arcadia v. State Water Resources Control

Water Segment: Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)

Pollutant: Trash

**Decision:** List

Weight of Evidence: This pollutant is being considered for listing under section 3.11 of the Listing

Policy. Under section 3.11, a minimum of one line of evidence is needed to

assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL was developed and approved by USEPA and an approved implementation plan was expected to result in attainment of the standard. However, on July 19, 2006 the State Board rescinded approval of the TMDL and remanded it back to the Regional

Board.

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

Limited Segments category.

SWRCB Staff Recommendation:

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

pollutant contributes to or causes the problem.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WE -

Wetland Habitat, WI - Wildlife Habitat

Information Used to Assess Water Quality:

The Los Angeles River Trash TMDL was completed by the Regional Board on September 19, 2001 (USEPA, 2002) to address impairments caused by trash. However, on July 19, 2006 the State Board rescinded approval of this TMDL and remanded it back to the Regional Board

based on court ruling City of Arcadia v. State Water Resources Control

Water Segment: Los Angeles River Reach 5 (within Sepulveda Basin)

Pollutant: Trash

**Decision:** List

Weight of Evidence: This pollutant is being considered for listing under section 3.11 of the Listing

Policy. Under section 3.11, a minimum of one line of evidence is needed to

assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL was developed and approved by USEPA and an approved implementation plan was expected to result in attainment of the standard. However, on July 19, 2006 the State Board rescinded approval of the TMDL and remanded it back to the Regional

Board.

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

Limited Segments category.

SWRCB Staff Recommendation:

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

pollutant contributes to or causes the problem.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use GW - Groundwater Recharge, R1 - Water Contact Recreation, R2 - Non-

Contact Recreation, WA - Warm Freshwater Habitat, WE - Wetland

Habitat, WI - Wildlife Habitat

Information Used to Assess Water Quality:

Visual trash assessment-TMDL completed (SWRCB, 2003).

Data Used to Assess

Water Quality:

The Los Angeles River Trash TMDL was completed on September 19, 2001(USEPA, 2002). However, on July 19, 2006 the State Board rescinded approval of the TMDL and remanded it back to the Regional

Board based on a court ruling in City of Arcadia v. State Water

Resources Control Board (D043877).

Water Segment: Los Cerritos Channel

Pollutant: Trash

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.11 of the Listing Policy. Under section 3.11, listing may be

proposed based on the situation-specific weight of evidence.

One line of evidence is available in the administrative record to assess this pollutant. The line of evidence is photographic evidence showing large

amounts of trash in this water body.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. Data and information has been evaluated that supports this decision.

2. The trash shown in the photos exceeded the narrative objective in the water body for protection of aquatic life and contact and noncontact

recreational beneficial uses.

3. Pursuant to section 3.11 of the Listing Policy, there is no additional

information showing that standards are being met.

SWRCB Staff Recommendation:

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

pollutant contributes to or causes the problem.

## Lines of Evidence:

Line of Evidence Visual

**Beneficial Use** R2 - Non-Contact Recreation, WI - Wildlife Habitat

Non-Numeric Objective: From the Los Angeles RWQCB Basin Plan: Waters shall not contain

floating materials, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.

**Data Used to Assess** 

Water Quality:

Several photographs showing large amounts of trash in Los Cerritos

Channel.

**Spatial Representation:** Photos taken in various locations throughout the Channel.

**Temporal Representation:** Photos were taken after storm events between the years of 2000 and

2006. Algalita Marine Research Foundation and Los Cerritos Wetlands

Stewards contributed the photos (Rogers, 2006).

Water Segment: Peck Road Park Lake

Pollutant: Trash

**Decision:** List

Weight of Evidence: This pollutant is being considered for listing under section 3.11 of the Listing

Policy. Under section 3.11, a minimum of one line of evidence is needed to

assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL was developed and approved by USEPA and an approved implementation plan was expected to result in attainment of the standard. However, on July 19, 2006 the State Board rescinded approval of the TMDL and remanded it back to the Regional

Board.

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

Limited Segments category.

SWRCB Staff Recommendation:

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

pollutant contributes to or causes the problem.

Lines of Evidence:

**Line of Evidence** Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation

Information Used to Assess Water Quality:

The Los Angeles River Trash TMDL was completed on September 19, 2001(USEPA, 2002). However, on July 19, 2006 the State Board rescinded approval of the TMDL and remanded it back to the Regional

Board based on a court ruling in City of Arcadia v. State Water

Resources Control Board (D043877).

Water Segment: San Pedro Bay Near/Off Shore Zones

Pollutant: Chlordane

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under sections 2.1 and 3.6 of the Listing Policy.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.6 the site has significant sediment toxicity and the pollutant is likely to cause or contribute to the toxic effect.

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

This conclusion is based on the staff findings that:

- 1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. Thirteen out of 50 sediment samples were toxic and 12 out of 32 sediment samples exceeded the sediment guideline. These exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The benthic community in this water body is impacted and this pollutant is associated with this impact. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: All waters should be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological response in, human, plant, animal, or aquatic

life.

**Evaluation Guideline:** Effects-Range Median value, 6 μg/kg dry wt. (Long and Morgan, 1990).

**Data Used to Assess** 

Water Quality:

Overall, 12 of 32 samples exceeded numeric guideline for chlordane. This total was created from many different sediment studies within San Pedro Bay. Six of 16 detected results exceeded in 1992-95 (BPTCP). Six of 16 detected results exceeded in 1996-1999 (BPTCP, Bight, and W-

EMAP) (LARWQCB & CCC, 2004).

**Spatial Representation:** Thirty-three sites were sampled throughout San Pedro Bay.

Temporal Representation: Samples were collected in 1992, 1994, 1996 - 1999.

Data Quality Assessment: Contaminated Sediment Task Force (2005) and references therein

(BPTCP QAPP, Bight 98 QAPP, EMAP 1999 QAPP).

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: All waters should be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological response in, human, plant, animal, or aquatic

life.

**Evaluation Guideline:** Samples were considered toxic if (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant

difference value.

**Data Used to Assess** 

Water Quality:

Overall, 13 of 50 samples were toxic. This total was created from several different sediment studies within San Pedro Bay. Eleven of 33 samples were toxic (BPTCP). Two of 14 samples were toxic (Bight, 1998). None of three samples were toxic (W-EMAP) (LARWQCB & CCC, 2004).

**Spatial Representation:** Fifty sites were sampled throughout San Pedro Bay.

Temporal Representation: Samples were collected in 1992, 1994, 1996, 1998 and 1999.

Data Quality Assessment: Contaminated Sediment Task Force (2005) and references therein

(BPTCP QAPP, Bight 98 QAPP, EMAP 1999 QAPP).

Santa Clara River Reach 6 (W Pier Hwy 99 to Bouquet Cyn Rd) (was named **Water Segment:** 

Santa Clara River Reach 8 on 2002 303(d) lists)

Pollutant: Chlorpyrifos

List Decision:

This pollutant is being considered for placement on the section 303(d) list Weight of Evidence:

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A sufficient number of samples exceed the CDFG Chlorpyrifos 0.05

mg/L four day average aquatic life toxicity guideline.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Ten of 39 samples exceeded the CDFG guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

**Beneficial Use:** WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ **Water Quality Criterion:** 

No individual pesticide or combination of pesticides shall be present in

concentrations that adversely affect beneficial uses.

CDFG Aquatic life toxicity one hour average: 0.08 mg/L and 4 day **Evaluation Guideline:** 

average: 0.05 mg/L.

**Data Used to Assess** 

Thirty-nine water samples, 10 samples exceeding the 4 day average. All exceedances were from Station STCBQT (SWAMP, 2004; LACDPW, Water Quality:

2003a; Newhall Land and Farming Co., 2006).

The Santa Clara River Reach 6 monitoring stations are located between Bouquet Canyon Road Bridge and West Point Highway 99. **Spatial Representation:** 

**Temporal Representation:** Samples were collected from August 2002 through April 2003.

**Data Quality Assessment:** SWAMP Quality Assurance Plan.

# Los Angeles Region (4)

# LIST AS BEING ADDRESSED

Recommendations to place waters and pollutants on the Being Addressed category of the section 303(d) List

Water Segment: Abalone Cove Beach

**Pollutant:** Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Available data shows that standards are currently not being met but a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This

listing will substitute the previous listing for beach closures.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA. This listing will substitute the previous listing for beach closures.

#### Lines of Evidence:

Numeric Line of Evidence Narrative Description Data

Beneficial Use: R1 - Water Contact Recreation

Matrix: -N/A

Water Quality Objective/ Water Quality Criterion:

Site-specific AB 411 Exceedance Frequency (April- October) per Santa

Monica Bay Beaches Bacteria TMDL.

Data Used to Assess Water

Quality:

Public health monitoring data and collected by two local agencies from 2000-2005 and compliance monitoring for the Santa Monica Bay

Beaches Bacteria TMDL collected from November 2004 to September 2005. The AB 411 exceedance frequency was exceeded 3 out of the 6

years (Heal the Bay, 2006).

Spatial Representation: Abalone Cove Shoreline Park.

Temporal Representation: Data collected between 2000 and 2005.

Data Quality Assessment: Data were collected by Los Angeles County Sanitation Department and

Los Angeles County Department of Health Services.

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

approved by USEPA on June 19, 2003.

Water Segment: Aliso Canyon Wash

**Pollutant:** Selenium

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to

result in attainment of the standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseWA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

The Los Angeles River and Tributaries Metals TMDL was approved by

USEPA on 12/22/05.

Water Segment: Ballona Creek

**Pollutant:** Copper

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.1 of the Listing Policy. Five lines of evidence are available in the record to access this pollutant. The total number of sample exceedances from the combined four dissolved copper lines of evidence when compared with CTR dissolved copper criteria exceed the frequency allowed by the

Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Thirty of 138 samples exceeded the dissolved copper CTR-CCC guidelines for copper and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. However, a TMDL is in place to address this pollutant in this water body.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

## SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. However, a TMDL has been approved by USEPA and an implementation plan is expected to result in attainment of the standard.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: CTR Copper Criterion for continuous concentration in water for the protection of aquatic life is expressed as a function of the total hardness of the water body. The aquatic life criteria will vary depending of total hardness reported. The criterion is linked and applicable for the

protection of aquatic life Beneficial Uses.

Data Used to Assess Water

Quality:

Numeric data generated from 22 samples taken from 10/12/00 to 4/30/03 at one to two-week sampling intervals. Six (6) samples exceeded the Copper Continuous Criterion Concentration, which equals the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects (LACDPW, 2003-2003).

Spatial Representation:

One sample site sampled during the dry and wet season beginning from 10/12/00 through 4/30/03 at approximately one to two week intervals.

Temporal Representation:

Twenty-two (22) samples where taken during the wet and dry season from 10/12/00 to 4/30/03 at approximately one to two week intervals as part of the Los Angeles County Storm water monitoring program prepared by the Los Angeles County Department of Public Works.

Environmental Conditions:

The Ballona Creek monitoring station is located at the existing stream gauge station (Stream Gauge No. F38C-R) between Sawtelle Boulevard and Sepulveda Boulevard in the City of Los Angeles. At this location, which was chosen to avoid tidal influences, the upstream tributary watershed of Ballona Creek is 88.8 square miles. The entire Ballona Creek Watershed is 127.1 square miles. At the gauging station, Ballona Creek is a concrete lined trapezoidal channel.

Data Quality Assessment:

Evaluation of Analytes and QA/QC Specifications for Monitoring Program (Woodward-Clyde, 1996) Los Angeles County Department of Public Works.

Numeric Line of Evidence

Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

California Toxics Rule. Acute criterion.

Data Used to Assess Water

Quality:

Thirty-eight water samples, 17 samples exceeding acute criterion

(LACDPW, 2003-2003).

Spatial Representation: Samples were collected spatially along Ballona Creek.

Temporal Representation: Fall, spring, winter, summer in different years.

Environmental Conditions: Data is 1-5 years old, data measured in water body during these years,

environmental conditions (winter, spring in different years).

Data Quality Assessment: Los Angeles County Department of Public Works.

Numeric Line of Evidence

Pollutant-Water

WA - Warm Freshwater Habitat Beneficial Use:

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

CTR Copper Criterion for continuous concentration in water for the protection of aquatic life is expressed as a function of the total hardness of the water body. The aquatic life criteria will vary depending of total hardness reported. The criterion is linked and applicable for the

protection of aquatic life Beneficial Uses.

Data Used to Assess Water

Quality:

None of 30 samples exceeded the CTR criterion. Detection limit was 10

μg/L (SCCWRP, 2004).

Spatial Representation: The metals data from SCCWRP were from a characterization study of

Ballona Creek and Estuary to identify relative metals contributions of runoff discharges during dry conditions. Twelve in-stream sites, including nine from Ballona Creek and three of the in-stream sites in the estuary. One of the storm drains was Sepulveda Canyon Channel and this data

was used to assess conditions for that listed reach.

Temporal Representation: Sampling was conducted on May 17, July 16, and September 24, 2003.

Environmental Conditions: These samples represent dry-weather conditions.

Data Quality Assessment: Southern California Coastal Water Research Project.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: CTR Copper Criterion for continuous concentration in water for the

protection of aquatic life.

Data Used to Assess Water

Quality:

Seven of 48 samples exceeded the CTR criterion. The detection limit is

10 μg/L (LACDPW, 2003-2003).

Spatial Representation: The metals data from the City of Los Angeles were from four locations

along Ballona Creek at National Boulevard, Overland Avenue, Centinela Boulevard, and Pacific Avenue. The data from National and Overland Boulevards are representative of Ballona Creek Reaches 1 and 2,

respectively.

Temporal Representation: Sampled on a monthly basis between January 2002 through May 2003.

Environmental Conditions: Samples are representative of dry-weather conditions. A hardness value

of 300 mg/L was used to calculate the water quality criterion.

Data Quality Assessment: City of Los Angeles.

Line of EvidenceRemedial Program in PlaceBeneficial UseWA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

The Ballona Creek Metals TMDL has been approved by the Regional

Board in 7/2005 and by USEPA in 12/2005.

Water Segment: Ballona Creek

**Pollutant:** Shellfish Harvesting Advisory

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Ballona Creek Coliform TMDL was approved by the RWQCB in June of 2006 and subsequently approved by

USEPA.

Water Segment: Ballona Creek

**Pollutant:** Toxicity

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Ballona Creek Metals TMDL was

approved by the RWQCB in 2005 and subsequently approved by USEPA

in 2005.

Water Segment: Ballona Creek

**Pollutant:** Trash

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under sections 2.2 and 3.11 of the

Listing Policy. Under these sections of the Policy, a minimum of one line of

evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle only because a TMDL had been completed. No substantial evidence in the record shows that standards are met.

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

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA, an implementation plan has been approved, and applicable water quality standards are exceeded.

#### Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR2 - Non-Contact Recreation

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Ballona Creek Trash TMDL was approved by the RWQCB in 2001 and subsequently approved by

USEPA.

Water Segment: Ballona Creek Estuary

**Pollutant:** Chlordane

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. There were twenty samples with 18 exceeding the sediment quality guideline and sediment toxicity has been observed. There were four tissue samples, none of which exceeded the screening value. However, a TMDL is in place to address this pollutant in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

#### Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological

responses in human, plant, animal, or aquatic life.

Evaluation Guideline: Significant toxicity as compared to control.

Data Used to Assess Water

Quality:

Four samples with 4 measurements of significant amphipod toxicity

(Anderson et al., 1998).

Spatial Representation: One station at the mouth of the estuary (BPTCP 44024.0).

Temporal Representation: Samples collected January 1993 and February 1994.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program.

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA), MA - Marine Habitat

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or

human health.

Evaluation Guideline: OEHHA Screening Value: 30 μg/kg (Brodberg and Pollock, 1999).

Data Used to Assess Water

Quality:

Four samples with no measurements exceeding the screening value

(SWAMP, 2004).

Spatial Representation: One station.

Temporal Representation: State Mussel Watch Data: Composite mussel sample of three individuals

collected in 1985, 1986, and 1988.

Toxic Substances Monitoring Program: One fish sample collected in

1993.

Data Quality Assessment: State Mussel Watch an Toxic Substances Monitoring Program. Data that

are older than ten years are not used by OEHHA in developing health assessments because data do not represent current conditions

(Brodberg, personal communication).

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: CM - Commercial and Sport Fishing (CA), MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

Evaluation Guideline: An Effects Range-Median value of 6 μg/g was used (Long and Morgan,

1990).

Data Used to Assess Water

Quality:

Twenty samples with 18 exceeding the sediment quality guideline

(Anderson, et al., 1998).

Spatial Representation: The sediment listings were based primarily on data collected as part of

the BPTCP, which collected samples from a single station (Station 44024.0) at the mouth of the estuary. The CSTF database also contains sediment data from two studies in the bay near the mouth of the Ballona Creek Estuary. In one study, the US Army Corps of Engineers (USACE) analyzed chemical concentrations in sediments at six stations. The other study performed by the LACDPW provides information on long-term trends in sediment contaminant concentrations at two locations.

Temporal Representation: BPTCP: January 1993 and February 1994.

USACE: in March 1998. LACDPW: 1990 -1999.

Data Quality Assessment: Description of QA information in the Contaminated Sediments Task

Force Database.

Line of Evidence Remedial Program in Place

Beneficial Use MA - Marine Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Ballona Creek Toxics TMDL was approved by RWQCB July of 2005 and subsequently approved by

USEPA.

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA), MA - Marine Habitat

Data Used to Assess Water

Quality:

The Ballona Creek Toxic Sediments TMDL has been approved by the

Regional Board in 7/2005 and by USEPA in 12/2005.

Water Segment: Ballona Creek Estuary

**Pollutant:** Copper

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Ten of 48 samples exceeded the copper water quality criterion and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. However there is a TMDL in place to address this pollutant in this water body.

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

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Water

Water Quality Objective/ CTR Copper Criterion for continuous concentration in water for the protection of marine aquatic life. The value used was 3.1 µg/L.

Data Used to Assess Water Forty-eight samples with 10 exceeding the water quality criterion.

Quality: Detection limits was 10 μg/L (USEPA and LARWQCB, 2005).

Spatial Representation: The metals data from the City of Los Angeles were from four locations along Ballona Creek at National Boulevard, Overland Avenue, Centinela Boulevard, and Pacific Avenue. The data from Centinela Boulevard and

Pacific Avenue are representative of the estuary and these data were

used to assess conditions in the estuary.

Temporal Representation: Sampled on a monthly basis between January 2002 through May 2003.

*Environmental Conditions:* Data are representative of dry-weather conditions.

Data Quality Assessment: City of Los Angeles.

Line of Evidence Narrative Description Data

Beneficial Use ES - Estuarine Habitat, MA - Marine Habitat

Data Used to Assess Water The

Quality:

The Ballona Creek Metals TMDL has been approved by the Regional

Board in 7/2005 and by USEPA in 12/2005.

Ballona Creek Estuary Water Segment:

Pollutant: DDT

Decision: List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

> Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segmentpollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. There were four samples with 1 measurement exceeding the screening value and sediment toxicity has been observed. However, a TMDL is in place to address this pollutant in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation. SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA), MA - Marine Habitat

Matrix:

Basin Plan: Toxic pollutants shall not be present at levels that will Water Quality Objective/ Water Quality Criterion:

bioaccumulate in aquatic life to levels which are harmful to aquatic life or

human health.

Evaluation Guideline: OEHHA Screening Value: 100 μg/kg (Brodberg and Pollock, 1999).

Data Used to Assess Water

Quality:

Four samples with 1 measurement exceeding the screening value

(TSMP, 2002).

Spatial Representation: One station.

State Mussel Watch Data: Composite mussel sample of three individuals Temporal Representation:

collected in 1985, 1986, and 1988.

Toxic Substances Monitoring Program: One fish sample collected in 1993.

Data Quality Assessment:

State Mussel Watch and Toxic Substances Monitoring Program. Data that are older than ten years are not used by OEHHA in developing health assessments because data do not represent current conditions (Brodberg, personal communication).

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: CM - Commercial and Sport Fishing (CA), MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

Evaluation Guideline: No sediment quality guideline is available that satisfies the conditions of

section 6.1.3 of the Listing Policy.

Data Used to Assess Water

Quality:

Twenty-eight samples were collected (Anderson et al., 1998).

Spatial Representation: There were eight sampling stations. The previous sediment listings were

based primarily on data collected as part of the BPTCP, which collected samples from a single station (Station 44024.0) at the mouth of the estuary. The Contaminated Sediments Task Force database also contains sediment data from two studies in the bay near the mouth of the Ballona Creek Estuary. In one study, the US Army Corps of Engineers (USACE) analyzed chemical concentrations in sediments at six stations. The other study performed by the LACDPW provides information on long-term trends in sediment contaminant concentrations at two

locations.

Temporal Representation: BPTCP: January 1993 and February 1994.

USACE: in March 1998. LACDPW: 1990 -1999.

Environmental Conditions: BPTCP: January 1993 and February 1994.

USACE: in March 1998. LACDPW: 1990 -1999.

Data Quality Assessment: Description of QA information in the Contaminated Sediments Task

Force Database.

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological

responses in human, plant, animal, or aquatic life.

Evaluation Guideline: Significant toxicity as compared to control.

Data Used to Assess Water

Quality:

Four samples with 4 measurements of significant amphipod toxicity

(Anderson et al., 1998).

Spatial Representation: One station at the mouth of the estuary (BPTCP 44024.0).

Temporal Representation: Samples collected January 1993 and February 1994.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program.

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA), MA - Marine Habitat

Data Used to Assess Water

Quality:

The Ballona Creek Toxic Sediments TMDL was approved by the

Regional Board in 7/2005 and by USEPA in 12/2005.

Line of Evidence Remedial Program in Place

Beneficial Use MA - Marine Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Ballona Creek Toxics TMDL was

approved by RWQCB July of 2005 and subsequently approved by

USEPA.

Water Segment: Ballona Creek Estuary

Pollutant: Lead

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Twenty eight samples with 12 exceeding the sediment quality guideline and sediment toxicity has been observed. However, a TMDL is in place to address this pollutant in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

#### Lines of Evidence:

Numeric Line of EvidencePollutant-SedimentBeneficial Use:MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

Evaluation Guideline: A Probable Effects Level of 112.18 µg/g was used (MacDonald et al.,

1996).

Data Used to Assess Water

Quality:

Twenty eight samples with 12 exceeding the sediment quality guideline

(Anderson et al., 1998).

Spatial Representation: The previous sediment listings were based primarily on data collected as

part of the BPTCP, which collected samples from a single station (Station 44024.0) at the mouth of the estuary. The Contaminated Sediments Task Force database also contains sediment data from two studies in the bay near the mouth of the Ballona Creek Estuary. In one study, the US Army Corps of Engineers (USACE) analyzed chemical concentrations in sediments at six stations. The other study performed by the LACDPW provides information on long-term trends in sediment contaminant concentrations at two locations.

Temporal Representation: BPTCP: January 1993 and February 1994.

USACE: in March 1998. LACDPW: 1990 -1999.

Data Quality Assessment: Description of QA information in the Contaminated Sediments Task

Force Database.

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological

responses in human, plant, animal, or aquatic life.

Evaluation Guideline: Significant toxicity as compared to control.

Data Used to Assess Water

Quality:

Four samples with 4 measurements of significant amphipod toxicity

(Anderson et al., 1998).

Spatial Representation: One station at the mouth of the estuary (BPTCP 44024.0).

Temporal Representation: Samples collected January 1993 and February 1994.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program.

Line of Evidence Remedial Program in Place

Beneficial Use MA - Marine Habitat

Data Used to Assess Water

Quality:

The Ballona Creek Metals TMDL has been approved by the Regional

Board in 7/2005 and by USEPA in 12/2005.

Line of Evidence Remedial Program in Place

Beneficial Use MA - Marine Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Ballona Creek Toxics TMDL was

approved by RWQCB July of 2005 and subsequently approved by

USEPA.

Water Segment: Ballona Creek Estuary

**Pollutant:** Polychlorinated biphenyls

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Four out of 4 tissue samples exceed the OEHHA screening value and one out of 28 samples exceed the sediment quality guideline. Sediment toxicity has been observed. However, a TMDL is in place to address this pollutant in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

#### Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological

responses in human, plant, animal, or aquatic life.

Evaluation Guideline: Significant toxicity as compared to control.

Data Used to Assess Water

Quality:

Four samples with 4 measurements of significant amphipod toxicity

(Anderson et al., 1998).

Spatial Representation: One station at the mouth of the estuary (BPTCP 44024.0).

Temporal Representation: Samples collected January 1993 and February 1994.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program.

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA), MA - Marine Habitat

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or

human health.

Evaluation Guideline: OEHHA Screening Value: 20 μg/kg (Brodberg and Pollock, 1999).

Data Used to Assess Water

Quality:

Four samples with 4 measurements exceeding the screening value

(TSMP, 2002).

Spatial Representation: One station.

Temporal Representation: State Mussel Watch Data: Composite mussel sample of three individuals

collected in 1985, 1986, and 1988.

Toxic Substances Monitoring Program: One fish sample collected in

1993.

Data Quality Assessment: State Mussel Watch and Toxic Substances Monitoring Program. Data

that are older than ten years are no used by OEHHA in developing health

assessments because data do not represent current conditions

(Brodberg, personal communication).

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: CM - Commercial and Sport Fishing (CA), MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

Evaluation Guideline: A sediment quality guideline of 400 ng/g was used to evaluate the data

(McDonald et al., 2000).

Data Used to Assess Water

Quality:

Twenty-eight samples with 1 exceeding the sediment quality guideline

(Anderson et al.,1998).

Spatial Representation: There were eight sampling stations. The previous sediment listings were

based primarily on data collected as part of the BPTCP, which collected samples from a single station (Station 44024.0) at the mouth of the estuary. The CSTF database also contains sediment data from two studies in the bay near the mouth of the Ballona Creek Estuary. In one study, the US Army Corps of Engineers (USACE) analyzed chemical concentrations in sediments at six stations. The other study performed by the LACDPW provides information on long-term trends in sediment

contaminant concentrations at two locations.

Temporal Representation: BPTCP: January 1993 and February 1994.

USACE: in March 1998. LACDPW: 1990 -1999. Data Quality Assessment: Description of QA information in the Contaminated Sediments Task

Force Database.

Line of Evidence Remedial Program in Place

Beneficial Use MA - Marine Habitat

Quality:

Quality:

Data Used to Assess Water A TMDL and implementation plan has been approved for this water

segment-pollutant combination. The Ballona Creek Toxics TMDL was approved by RWQCB July of 2005 and subsequently approved by

USEPA.

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA), MA - Marine Habitat

Data Used to Assess Water The Ballona Creek Toxic Sediments TMDL has been approved by the

Regional Board in 7/2005 and by USEPA in 12/2005.

Water Segment: Ballona Creek Estuary

**Pollutant:** Polycyclic Aromatic Hydrocarbons (PAHs)

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MA - Marine Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Ballona Creek Toxics TMDL was

approved by RWQCB July of 2005 and subsequently approved by

USEPA.

Water Segment: Ballona Creek Estuary

Pollutant: Sediment Toxicity

Decision: List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess delisting status. Two lines of evidence are

available in the administrative record to assess toxicity.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segmentpollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Four out of 4 samples exhibit significant toxicity, however, a TMDL in place to address toxicity in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are met.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

#### Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological

responses in human, plant, animal, or aquatic life.

Evaluation Guideline: Significant toxicity as compared to control.

Data Used to Assess Water

Quality:

Four samples with 4 measurements of significant amphipod toxicity

(Anderson et al., 1998).

Spatial Representation: One station at the mouth of the estuary (BPTCP 44024.0).

Temporal Representation: Samples collected January 1993 and February 1994.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program. Line of Evidence Remedial Program in Place

Beneficial Use MA - Marine Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Ballona Creek Toxics TMDL was approved by RWQCB July of 2005 and subsequently approved by

USEPA.

Water Segment: Ballona Creek Estuary

**Pollutant:** Zinc

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. There were twenty-eight samples with 3 measurements exceeding the sediment quality guideline and sediment toxicity has been observed. There were four tissue samples, none of which exceeded the screening value. However, a TMDL is in place to address this pollutant in this water body. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

#### Lines of Evidence:

Numeric Line of EvidencePollutant-SedimentBeneficial Use:MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

Evaluation Guideline: An Effects Range-Median of 410 μg/g was used (Long et al., 1995).

Data Used to Assess Water

Quality:

Twenty-eight samples with 3 measurements exceeding the sediment

quality guideline (Anderson et al., 1998).

Spatial Representation: The previous sediment listings were based primarily on data collected as

part of the BPTCP, which collected samples from a single station (Station

44024.0) at the mouth of the estuary. The CSTF database also contains sediment data from two studies in the bay near the mouth of the Ballona Creek Estuary. In one study, the US Army Corps of Engineers (USACE) analyzed chemical concentrations in sediments at six stations. The other study performed by the LACDPW provides information on long-term trends in sediment contaminant concentrations at two locations.

Temporal Representation: BPTCP: January 1993 and February 1994.

USACE: in March 1998. LACDPW: 1990 -1999.

Data Quality Assessment: Description of QA information in the Contaminated Sediments Task

Force Database.

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological

responses in human, plant, animal, or aquatic life.

Evaluation Guideline: Significant toxicity as compared to control.

Data Used to Assess Water

Quality:

Four samples with 4 measurements of significant amphipod toxicity

(Anderson et al., 1998).

Spatial Representation: One station at the mouth of the estuary (BPTCP 44024.0).

Temporal Representation: Samples collected January 1993 and February 1994.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program.

Line of Evidence Remedial Program in Place

Beneficial Use MA - Marine Habitat

Data Used to Assess Water

Quality:

The Ballona Creek Metals TMDL has been approved by the Regional

Board in 7/2005 and by USEPA in 12/2005.

**Line of Evidence** Remedial Program in Place

Beneficial Use MA - Marine Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Ballona Creek Toxics TMDL was

approved by RWQCB July of 2005 and subsequently approved by

USEPA.

Water Segment: Ballona Creek Wetlands

**Pollutant:** Trash

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MA - Marine Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Ballona Creek Trash TMDL was

approved by the RWQCB in 2001 and subsequently approved by

USEPA.

Water Segment: Big Rock Beach

**Pollutant:** Coliform Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it

is not a pollutant or toxicity (section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant (coliform) should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an

implementation plan has been approved.

#### Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and

approved by USEPA on June 19, 2003.

Bluff Cove Beach Water Segment: Pollutant: Indicator Bacteria

Decision: List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Available data shows that standards are currently not being met but a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This listing will substitute the previous listing for beach closures.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. The AB 411 exceedance frequency was exceeded 3 out of the 6 years. However, a TMDL is in place to address this pollutant in this water body. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff

Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA.

#### Lines of Evidence:

Numeric Line of Evidence Narrative Description Data Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

Site-specific AB 411 Exceedance Frequency (April- October) per Santa

Monica Bay Beaches Bacteria TMDL.

Data Used to Assess Water

Quality:

Public health monitoring data collected by two local agencies from 2000-2005 and compliance monitoring for the Santa Monica Bay Beaches Bacteria TMDL collected from November 2004 to September 2005. The

AB 411 exceedance frequency was exceeded 3 out of the 6 years (Heal

the Bay, 2006).

Spatial Representation: Palos Verdes (Bluff) Cove, Palos Verdes Estates.

Temporal Representation: Samples collected between 2000 and 2005.

Data Quality Assessment: Data were collected by Los Angeles County Sanitation Department and

Los Angeles County Department of Health Services.

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess A TMDL and implementation plan has been approved for this water Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry

segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

approved by USEPA on June 19, 2003.

Water Segment: Brown Barranca/Long Canyon

**Pollutant:** Nitrate and Nitrite

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination

was moved off the section 303(d) list during the 2002 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Clara River Nitrogen TMDL was approved by RWQCB on August 7, 2003 and subsequently

approved by USEPA on March 18, 2004.

Water Segment: Burbank Western Channel

Pollutant: Copper

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Three samples exceeded the CTR dissolved copper criterion for the protection of aquatic life.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2.The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three of six samples exceeded the CTR dissolved copper criterion for continuous concentration in water and there is a TMDL in place to address this pollutant in this water body.

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

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved.

#### Lines of Evidence:

**Numeric Line of Evidence** Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: CTR Dissolved Copper Criterion for continuous concentration (CCC) in water for the protection of aquatic life is expressed as a function of the total hardness of the water body. The aquatic life criteria will vary depending of total hardness reported at the sampling site. The CCC for dissolved copper is the highest concentration to which aquatic life can be exposed for an extended period of time (four days) without deleterious effects. This criterion is linked and applicable for the protection of aquatic

life Beneficial Uses.

Data Used to Assess Water

Quality:

Data generated from six samples out of which three samples exceeded CTR criteria values (LACDPW, 2003a).

Spatial Representation: One sample site.

Temporal Representation: Six monthly samples, Five (5) taken during the wet season (11/08/2002-

03/15/2003) and one (1) sample taken during the dry season

(04/30/2003).

Environmental Conditions: Data age 1-2 years. Data taken during the wet and dry seasons.

Data Quality Assessment: Evaluation of Analytes and QA/QC Specifications for Monitoring Program

(Woodward-Clyde, 1996) Los Angeles County Department of Public

Works.

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Metals/Toxics

TMDL was approved by the RWQCB in 2005 and subsequently approved

by USEPA in 2005.

Water Segment: Cabrillo Beach (Outer)

**Pollutant:** Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.3 of the Listing Policy. Under section 3.3 if a site-specific exceedance frequency is available, it may be used instead of the ten percent exceedance frequency as described in Table 3.2. The site-specific

exceedance frequency shall be the number of water quality standard

exceedance in a relatively unimpacted watershed.

Two lines of evidence are available in the administrative record to assess this pollutant. Available data shows that standards are currently not being met but a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This listing will substitute the previous listing for beach closures.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Fifty-six of 3285 samples exceed the 30-day enterococcus geomean limit and this exceeds the allowable site-specific exceedance frequency.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff
Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Los Angeles RV Water Quality Criterion: recreation (REC

Los Angeles RWQCB Basin Plan: In waters designated for water contact recreation (REC-1), the geometric mean for enterococcus density exceed

35/100 mL over a 30-day period.

Evaluation Guideline: Regional Board Resolution No. 2002-022: The geomean targets may not

be exceeded at any time.

Data Used to Assess Water

Quality:

Fifty six of 3,285 samples exceed the 30-day enterococcus geomean

limit (LACSD, 2006)

Spatial Representation: S7 - Cabrillo Beach (ocean side). The LACSD also sampled the inshore

waters by boat.

Temporal Representation: January 1997 to December 2005.

Line of Evidence

Remedial Program in Place

Beneficial Use

R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

approved by USEPA on June 19, 2003.

Water Segment: Calleguas Creek Reach 1 (was Mugu Lagoon on 1998 303(d) list)

**Pollutant:** Chlordane

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use ES - Estuarine Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides

TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 1 (was Mugu Lagoon on 1998 303(d) list)

Pollutant: DDT

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of

the Policy.

3. Two out of 4 samples exceeded the OEHHA Screening Value. However, a

TMDL is in place to address this pollutant in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to

aguatic life or human health.

Evaluation Guideline: 100 ng/g (OEHHA Screening Value).

Data Used to Assess Water

Quality:

Two out of 4 samples exceeded. Representation: A total of 4 filet

composite samples of gray smoothhound shark were collected. Shark were collected in 1992-94 and 1997. The guideline was exceeded in

samples collected in 1992 and 1993 (TSMP, 2002).

Spatial Representation: One station located at Laguna Road Bridge.

Temporal Representation: Samples were collected annually 1992-94, 1997.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides

TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 1 (was Mugu Lagoon on 1998 303(d) list)

Pollutant: Endosulfan

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use ES - Estuarine Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 1 (was Mugu Lagoon on 1998 303(d) list)

Pollutant: Nitrogen

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use ES - Estuarine Habitat

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

implementation plan. USEPA approved the TMDL on June 20, 2003.

Water Segment: Calleguas Creek Reach 1 (was Mugu Lagoon on 1998 303(d) list)

**Pollutant:** Polychlorinated biphenyls

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek PCBs TMDL was approved by the RWQCB in July of 2005 and subsequently approved by

USEPA.

Water Segment: Calleguas Creek Reach 1 (was Mugu Lagoon on 1998 303(d) list)

**Pollutant:** Sediment Toxicity

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use ES - Estuarine Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 2 (estuary to Potrero Rd- was Calleguas Creek

Reaches 1 and 2 on 1998 303d list)

**Pollutant:** Ammonia

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and

an implementation plan has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use ES - Estuarine Habitat

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

implementation plan. USEPA approved the TMDL on June 20, 2003.

Water Segment: Calleguas Creek Reach 2 (estuary to Potrero Rd- was Calleguas Creek

Reaches 1 and 2 on 1998 303d list)

Pollutant: ChemA

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MU - Municipal & Domestic, WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 2 (estuary to Potrero Rd- was Calleguas Creek

Reaches 1 and 2 on 1998 303d list)

Pollutant: Chlordane

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MU - Municipal & Domestic, WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 2 (estuary to Potrero Rd- was Calleguas Creek

Reaches 1 and 2 on 1998 303d list)

**Pollutant:** DDT

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Out of eleven water samples, 7 exceeded the CTR criteria. However, a TMDL is in place to address this pollutant in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: California Toxics Rule: 0.001 µg/L.

Data Used to Assess Water

Quality:

Eleven water samples, 7 samples exceeding (SWRCB, 2003).

Spatial Representation: Three sites.

Temporal Representation: Summer, fall, winter, spring in 1998 and 1999.

Data Quality Assessment: Calleguas Creek Characterization Study

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 2 (estuary to Potrero Rd- was Calleguas Creek

Reaches 1 and 2 on 1998 303d list)

**Pollutant:** Endosulfan

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MU - Municipal & Domestic, WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 2 (estuary to Potrero Rd- was Calleguas Creek

Reaches 1 and 2 on 1998 303d list)

Pollutant: Nitrogen

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and

an implementation plan has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

implementation plan. USEPA approved the TMDL on June 20, 2003.

Water Segment: Calleguas Creek Reach 2 (estuary to Potrero Rd- was Calleguas Creek

Reaches 1 and 2 on 1998 303d list)

**Pollutant:** Polychlorinated biphenyls

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

USEPA.

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek PCBs TMDL was approved by the RWQCB in July of 2005 and subsequently approved by

Water Segment: Calleguas Creek Reach 2 (estuary to Potrero Rd- was Calleguas Creek

Reaches 1 and 2 on 1998 303d list)

**Pollutant:** Sediment Toxicity

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MU - Municipal & Domestic, WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 2 (estuary to Potrero Rd- was Calleguas Creek

Reaches 1 and 2 on 1998 303d list)

**Pollutant:** Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MU - Municipal & Domestic, WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 2 (estuary to Potrero Rd- was Calleguas Creek

Reaches 1 and 2 on 1998 303d list)

**Pollutant:** Toxaphene

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MU - Municipal & Domestic, WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 3 (Potrero Road upstream to confluence with Conejo

Creek on 1998 303d list)

**Pollutant:** DDT

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to

aquatic life or human health.

Evaluation Guideline: 100 ng/g OEHHA Screening Value (Brodberg & Pollock, 1999).

1000 ng/g NAS Guideline (Whole Fish) (NAS, 1972).

Data Used to Assess Water

Quality:

Three out of 3 samples exceeded OEHHA Screening Value. Six out of 7 samples exceeded NAS Guidelines. A total of 3 filet composite samples were collected: one fathead minnow (1994), one brown bullhead (1999),

and one black bullhead (2001). All three samples exceeded the

guidelines. A total of 7 whole fish composite samples were collected: five fathead minnow (1992-94 & 1997) and two arroyo chub (2000-01). All but

one arroyo chub sample exceeded the guidelines (TSMP, 2002).

Spatial Representation: One station located downstream of Lewis Road crossing.

Temporal Representation: Samples were collected annually 1992-94, 1997, 1999 -2001.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

and Game.

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 3 (Potrero Road upstream to confluence with Conejo

Creek on 1998 303d list)

**Pollutant:** Dieldrin

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to

aquatic life or human health.

Evaluation Guideline: 2 ng/q - OEHHA Screening Value (Brodberg & Pollock, 1999).

Data Used to Assess Water

Quality:

Two out of 3 samples exceeded. A total of 3 filet composite samples were collected: one fathead minnow (1994), one brown bullhead (1999), and one black bullhead sample (2001). Fathead minnow and brown

bullhead exceeded the guideline (TSMP, 2002).

Spatial Representation: One station located downstream of Lewis Road crossing.

Temporal Representation: Samples were collected 1994, 1999, and 2001.

Data Quality Assessment: Toxic Substances Monitoring Program 1994-95 Data Report.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish and Game.

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 3 (Potrero Road upstream to confluence with Conejo

Creek on 1998 303d list)

**Pollutant:** Nitrate and Nitrite

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

After review of the available data and information for this recommendation, SWRCB staff concludes that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and

an implementation plan has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MU - Municipal & Domestic

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

implementation plan. USEPA approved the TMDL on June 20, 2003.

Water Segment: Calleguas Creek Reach 3 (Potrero Road upstream to confluence with Conejo

Creek on 1998 303d list)

**Pollutant:** Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 3 (Potrero Road upstream to confluence with Conejo

Creek on 1998 303d list)

**Pollutant:** Toxaphene

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to

aquatic life or human health.

Evaluation Guideline: 30 ng/g OEHHA Screening Value (Brodberg & Pollock, 1999).

100 ng/g NAS Guideline (Whole Fish) (NAS, 1972).

Data Used to Assess Water

Quality:

Two out of 2 samples exceeded OEHHA Screening Value. Eight out of 8

samples exceeded NAS Guidelines (TSMP, 2002).

Spatial Representation: One station located downstream of Lewis Road crossing.

Temporal Representation: Samples were collected annually 1992-94, 1997, 1999 -2001.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish and Game.

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon

to Central Avenue on 1998 303d list)

Pollutant: ChemA

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon

to Central Avenue on 1998 303d list)

**Pollutant:** Chlordane

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three out of 3 samples exceeded the OEHHA Screening Value. However,

a TMDL is in place to address this pollutant in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to

aguatic life or human health.

Evaluation Guideline: 100 ng/g NAS Guideline (whole fish)

Data Used to Assess Water

Quality:

Three out of 3 samples exceeded. A total of 3 whole fish composite samples of fathead minnows were collected in 1993-94 and 1997. The

guideline was exceeded in all samples (TSMP, 2002).

Spatial Representation: One station located below concrete apron just downstream of Woods

Road.

Temporal Representation: Samples were collected annually 1993-94 and 1997.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides

TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon

to Central Avenue on 1998 303d list)

**Pollutant:** Chlorpyrifos

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Toxicity TMDL was approved by the RWQCB in July of 2005 and subsequently approved by

USEPA.

Water Segment: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon

to Central Avenue on 1998 303d list)

**Pollutant:** DDT

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to

aquatic life or human health.

Evaluation Guideline: 1000 ng/g NAS Guideline (whole fish)

Data Used to Assess Water

Quality:

Three out of 3 samples exceeded (note: Fillet sample of goldfish exceeded OEHHA screening value in 1992). A total of 3 whole fish composite samples of flathead minnow were collected. Flathead minnow

samples were collected in 1993-94 and 1997. The guideline was

exceeded in all samples (TSMP, 2002).

Spatial Representation: One station located below concrete apron just downstream of Woods

Road.

Temporal Representation: Samples were collected annually from 1993-94 and 1997.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Environmental Chemistry Quality Assurance and Data Report for the

Toxic Substances Monitoring Program, 1996-2000. Department of Fish and Game

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water A TI

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon

to Central Avenue on 1998 303d list)

**Pollutant:** Dieldrin

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon

to Central Avenue on 1998 303d list)

**Pollutant:** Endosulfan

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon

to Central Avenue on 1998 303d list)

**Pollutant:** Nitrate as Nitrate (NO3)

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Out of forty-three water samples, 38 were exceeding the water quality objective. However, a TMDL is in place to address this pollutant in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the Water Quality Limited Segments Being Addressed category section of the 303(d) list because applicable water quality standards are not being met and an approved TMDL is currently in place and is expected to result in attainment of

approved TMDL is currently in place and is expected to result in attainment of

nitrogen standards in this water body.

### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: GW - Groundwater Recharge

Matrix: Water

Water Quality Objective/ Basin Plan: Waters shall not exceed 10 mg/L nitrogen as nitrate-nitrogen Water Quality Criterion: Basin Plan: Waters shall not exceed 10 mg/L nitrogen as nitrate-nitrogen (NO2-N), 45 mg/L as nitrate (NO3), 10 mg/L as

nitrate-nitrogen (NO3-N) or as otherwise designated in another part of

the Basin Plan.

Data Used to Assess Water

Quality:

Forty-three water samples, 38 exceeding (SWRCB,2003).

Spatial Representation:

Three sites.

Temporal Representation: Summer, fall, winter, and spring.

Data Quality Assessment: Calleguas Creek Characterization Study

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

implementation plan. USEPA approved the TMDL on June 20, 2003.

Water Segment: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon

to Central Avenue on 1998 303d list)

Pollutant: Nitrogen

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Out of forty-three water samples, 38 were exceeding the water quality objective. However, a TMDL is in place to address this pollutant in this water body.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved. Furthermore, the qualitative line of evidence on excess algal growth merely reflects conditions caused by documented nutrient pollutants and therefore should be removed from the 303(d) list. Nutrient TMDLs development and implementation should result in attainment of standards and the subsequent elimination of excess algal growth conditions.

### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: GW - Groundwater Recharge

Matrix: Water

Water Quality Objective/ Basin Plan: Waters shall not exceed 10 mg/L nitrogen as nitrate-nitrogen Water Quality Criterion: Plus nitrite-nitrogen (NO2-N), 45 mg/L as nitrate (NO3), 10 mg/L as

nitrate-nitrogen (NO3-N) or as otherwise designated in another part of

the Basin Plan.

Data Used to Assess Water

Quality:

Forty-three water samples, 38 exceeding (SWRCB,2003).

Spatial Representation: Three sites.

Temporal Representation: Summer, fall, winter, and spring.

Data Quality Assessment: Calleguas Creek Characterization Study

Line of EvidenceRemedial Program in PlaceBeneficial UseGW - Groundwater Recharge

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

implementation plan. USEPA approved the TMDL on June 20, 2003.

Water Segment: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon

to Central Avenue on 1998 303d list)

**Pollutant:** Polychlorinated biphenyls

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek PCBs TMDL was approved by the RWQCB in July of 2005 and subsequently approved by

USEPA.

Water Segment: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon

to Central Avenue on 1998 303d list)

**Pollutant:** Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseWA - Warm Freshwater Habitat

beneficial Use WA - Warm Freshwater Habi

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon

to Central Avenue on 1998 303d list)

**Pollutant:** Toxaphene

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

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

ridarededa portion er tilo dedileri ede(a) ilot.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three out of 3 samples exceeded the OEHHA Screening Value. However,

a TMDL is in place to address this pollutant in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to

aquatic life or human health.

Evaluation Guideline: 100 ng/g NAS Guideline (whole fish)

Data Used to Assess Water

Quality:

Three out of 3 samples exceeded (note: Fillet sample of goldfish exceeded OEHHA screening value in 1992). A total of 3 whole fish composite samples of fathead minnows were collected in 1993-94 and

1997. The guideline was exceeded in all samples (TSMP, 2002).

Spatial Representation: One station located below concrete apron just downstream of Woods

Road.

Temporal Representation: Samples were collected annually 1993-94 and 1997.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides

TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon

to Central Avenue on 1998 303d list)

**Pollutant:** Toxicity

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseWA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Toxicity TMDL was approved by the RWQCB in July of 2005 and subsequently approved by

USEPA.

Water Segment: Calleguas Creek Reach 5 (was Beardsley Channel on 1998 303d list)

Pollutant: ChemA

Decision: List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segmentpollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved by USEPA.

Water Segment: Calleguas Creek Reach 5 (was Beardsley Channel on 1998 303d list)

Pollutant: Chlordane

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water A

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 5 (was Beardsley Channel on 1998 303d list)

**Pollutant:** Chlorpyrifos

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Toxicity TMDL was approved by the RWQCB in July of 2005 and subsequently approved by

USEPA.

Water Segment: Calleguas Creek Reach 5 (was Beardsley Channel on 1998 303d list)

**Pollutant:** DDT

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water A TMDL and

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 5 (was Beardsley Channel on 1998 303d list)

Pollutant: Dacthal

Decision: List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segmentpollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

Lines of Evidence:

Line of Evidence Remedial Program in Place Beneficial Use MU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 5 (was Beardsley Channel on 1998 303d list)

**Pollutant:** Dieldrin

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 5 (was Beardsley Channel on 1998 303d list)

Pollutant: Endosulfan

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MU - Municipal & Domestic

Data Used to Assess Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 5 (was Beardsley Channel on 1998 303d list)

Pollutant: Nitrogen

**Decision:** List in Being Addressed Category

Weight of Evidence: This water quality condition is being considered for listing under section 2.2 of

the Listing Policy. Under this section of the Policy, a minimum of one line of

evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this water body condition. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of

the standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and

an implementation plan has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

Water Segment: Calleguas Creek Reach 5 (was Beardsley Channel on 1998 303d list)

**Pollutant:** Polychlorinated biphenyls

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek PCBs TMDL was approved by the RWQCB in July of 2005 and subsequently approved by

USEPA.

Water Segment: Calleguas Creek Reach 5 (was Beardsley Channel on 1998 303d list)

**Pollutant:** Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 5 (was Beardsley Channel on 1998 303d list)

**Pollutant:** Toxaphene

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 5 (was Beardsley Channel on 1998 303d list)

**Pollutant:** Toxicity

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Toxicity TMDL was approved by the RWQCB in July of 2005 and subsequently approved by

USEPA.

Water Segment: Calleguas Creek Reach 6 ( was Arroyo Las Posas Reaches 1 and 2 on 1998

303d list)

**Pollutant:** Ammonia

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff concludes that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303 (d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

Water Segment: Calleguas Creek Reach 6 (was Arroyo Las Posas Reaches 1 and 2 on 1998

303d list)

**Pollutant:** DDT

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 6 ( was Arroyo Las Posas Reaches 1 and 2 on 1998

303d list)

**Pollutant:** Nitrate and Nitrite

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff concludes that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303 (d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

Water Segment: Calleguas Creek Reach 6 (was Arroyo Las Posas Reaches 1 and 2 on 1998

303d list)

**Pollutant:** Nitrate as Nitrate (NO3)

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Eight out of 12 samples the water quality objective. However, a TMDL is in place to address this pollutant in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff concludes that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303 (d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

#### Lines of Evidence:

**Numeric Line of Evidence** Pollutant-Water

Beneficial Use: GW - Groundwater Recharge

Matrix: Water

Water Quality Objective/ Basin Plan: Waters shall not exceed 10 mg/L nitrogen as nitrate-nitrogen Water Quality Criterion: plus nitrite-nitrogen (NO2-N), 45 mg/L as nitrate (NO3), 10 mg/L as

plus nitrite-nitrogen (NO2-N), 45 mg/L as nitrate (NO3), 10 mg/L as nitrate-nitrogen (NO3-N) or as otherwise designated in another part of

the Basin Plan.

Data Used to Assess Water

Quality:

Twelve water samples, 8 samples exceeding (SWRCB,2003).

Spatial Representation: One site.

Temporal Representation: Summer, fall, winter, spring.

Data Quality Assessment: NPDES reports.

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

Water Segment: Calleguas Creek Reach 6 (was Arroyo Las Posas Reaches 1 and 2 on 1998

303d list)

**Pollutant:** Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on 1998 303d

list)

**Pollutant:** Ammonia

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff concludes that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303 (d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

Water Segment: Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on 1998 303d

list)

**Pollutant:** Organophosphorus Pesticides

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Toxicity TMDL was approved by the RWQCB in July of 2005 and subsequently approved by

USEPA.

Water Segment: Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on 1998 303d

list)

**Pollutant:** Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 8 (was Tapo Canyon Reach 1)

**Pollutant:** Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MU - Municipal & Domestic, WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998)

303d list)

Pollutant: ChemA

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides

TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998

303d list)

**Pollutant:** Chlordane

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two out of 2 samples exceeded the Screening Value. However, a TMDL is in place to address this pollutant in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect

beneficial uses.

Evaluation Guideline: OEHHA Screening Value: 30 μg/kg (Brodberg and Pollock, 1999).

Section 6.1.3 of the Listing Policy does not allow the use of MTRLs to

evaluate fish and shellfish tissue data.

Data Used to Assess Water

Quality:

Two tissue samples, 2 samples exceeding (TSMP, 2002).

Spatial Representation: Sample was collected spatially.

Temporal Representation: One-time sample.

Data Quality Assessment: **TSMP** 

Remedial Program in Place Line of Evidence

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides

TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998

303d list)

**Pollutant:** DDT

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Four out of 4 samples exceeded the Screening Value. However, a TMDL is in place to address this pollutant in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to

aquatic life or human health.

Evaluation Guideline: 1000 ng/g - NAS Guideline (whole fish).

Data Used to Assess Water

Quality:

Four out of 4 samples exceeded. A total of 4 whole fish composite samples of fathead minnow and mosquitofish were collected. Two fathead minnow samples were collected in 1992. Two mosquitofish samples were collected in 1998. The guideline was exceeded in all

samples (TSMP, 2002).

Spatial Representation: One station located at Rancho Road crossing south west of Camarillo.

Temporal Representation: Samples were collected in 6/2/92 and 6/25/98.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 Data Report.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998

303d list)

**Pollutant:** Dieldrin

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Four out of 4 samples exceeded the Screening Value. However, a TMDL is in place to address this pollutant in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion:

Los Angeles RWQCB Basin Plan: No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect

beneficial uses.

Evaluation Guideline: OEHHA Screening Value: 2.0 μg/kg (Brodberg and Pollock, 1999).

Section 6.1.3 of the Listing Policy does not allow the use of MTRLs to

evaluate fish and shellfish tissue data.

Data Used to Assess Water

Quality:

Two tissue samples, 2 samples exceeding (TSMP, 2002).

Spatial Representation: Sample was collected spatially.

Temporal Representation: One-time sample.

Data Quality Assessment: TSMP QAPP.

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides

TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998

303d list)

**Pollutant:** Endosulfan

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998

303d list)

Pollutant: Hexachlorocyclohexane

Decision: List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. There are two tissue samples available with none exceeding the screening value but this is not enough samples to delist this water body for this pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segmentpollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at Water Quality Criterion:

levels that will bioaccumulate in aquatic life to levels which are harmful to

aquatic life or human health.

Evaluation Guideline: OEHHA Screening Value: 30 µg/kg for Lindane (gamma-HCH) (Brodberg

and Pollock, 1999). Section 6.1.3 of the Listing Policy does not allow the

use of MTRLs to evaluate fish and shellfish tissue data.

Data Used to Assess Water

Quality:

Two tissue samples with no samples exceeding the screening value

(TSMP, 2002).

Spatial Representation: Sample was collected spatially.

Temporal Representation: One-time sample.

**TSMP** Data Quality Assessment:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998

303d list)

Pollutant: Nitrate as Nitrate (NO3)

Decision: List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation

plan is expected to result in attainment of the standard.

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

This conclusion is based on the staff findings that:

1. It is unknown whether the data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Six of 12 samples exceeded the nitrate as nitrate (NO3) water quality objective. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are met.

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

### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: GW - Groundwater Recharge

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

Basin Plan: Waters shall not exceed 10 mg/L nitrogen as nitrate-nitrogen plus nitrite-nitrogen (NO2-N), 45 mg/L as nitrate (NO3), 10 mg/L as nitrate-nitrogen (NO3-N) or as otherwise designated in [another part of

the Basin Plan].

Data Used to Assess Water

Quality:

Twelve water samples, 6 samples exceeding (SWRCB, 2002).

Spatial Representation: One site only (Conejo Creek). Temporal Representation: Summer, fall, winter, spring.

**Environmental Conditions:** Data 3-4 years old, data measured at site, during all seasons.

Data Quality Assessment: Calleguas Creek Characterization Study

Remedial Program in Place Line of Evidence

Beneficial Use MU - Municipal & Domestic

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by the RWQCB in October 2002. The TMDL has an approved

Water Segment: Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998

303d list)

**Pollutant:** Nitrogen, Nitrate

**Decision:** List in Being Addressed Category

Weight of Evidence: This water quality condition is being considered for listing under Water Quality

limited segment being addressed (section 2.2) of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess

listing status.

One line of evidence is available in the administrative record to assess this water body condition. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Qualitative excess algal growth information is backed by nutrient data and is sufficient to support continued placement on the section 303(d) list

(Listing Policy section 3.7).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and

an implementation plan has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

Water Segment: Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998)

303d list)

**Pollutant:** Polychlorinated biphenyls

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two samples exceed the USEPA screening value, however, a TMDL is in place to address

this pollutant in this water body.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

6.The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

2. Two of 2 samples exceeded the USEPA Screening value and a TMDL is in place to address this pollutant in this water body.

3. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved.

### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to

aquatic life or human health.

Evaluation Guideline: USEPA Screening Value: 5.47 μg/kg (USEPA, 2000). Section 6.1.3 of

the Listing Policy does not allow the use of MTRLs to evaluate fish and

shellfish tissue data.

Data Used to Assess Water

Quality:

Two composite tissue samples, 2 samples exceeding (TSMP, 2002).

Spatial Representation: Samples were collected spatially.

Temporal Representation: One-time sample.

Data Quality Assessment: TSMP

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek PCBs TMDL was approved by the RWQCB in July of 2005 and subsequently approved by

USEPA.

Water Segment: Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998

303d list)

**Pollutant:** Toxaphene

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

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

radiocod portion of the cocton coc(a) not.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Four out of 4 samples exceeded the Screening Value. However, a TMDL is in place to address this pollutant in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to

aquatic life or human health.

Evaluation Guideline: 100 ng/g - NAS Guideline (Whole fish).

Data Used to Assess Water

Quality:

Four out of 4 samples exceeded. Two whole fish composite samples of fathead minnow and 2 whole fish composite samples of mosquitofish were collected. Fathead minnow were collected in 1992. Mosquitofish were collected in 1998. The guideline was exceeded in all samples

(TSMP, 2002).

Spatial Representation: One station located at Rancho Road crossing south west of Camarillo.

Temporal Representation: Samples were collected annually in 1992 and 1998.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 Data Report.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2 on

1998 303d list)

**Pollutant:** Ammonia

**Decision:** List in Being Addressed Category

Weight of Evidence: This water quality condition is being considered for listing under Water Quality

limited segment being addressed (section 2.2) of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess

listing status.

One line of evidence is available in the administrative record to assess this water body condition. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Qualitative excess algal growth information is backed by nutrient data and is sufficient to support continued placement on the section 303(d) list

(Listing Policy section 3.7).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and

an implementation plan has been approved.

Lines of Evidence:

**Line of Evidence** Remedial Program in Place

Beneficial Use CO - Cold Freshwater Habitat, MU - Municipal & Domestic

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

Water Segment: Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2 on

1998 303d list)

Pollutant: ChemA

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MU - Municipal & Domestic, WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2 on

1998 303d list)

**Pollutant:** DDT

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MU - Municipal & Domestic, WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2 on

1998 303d list)

**Pollutant:** Endosulfan

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MU - Municipal & Domestic, WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2 on

1998 303d list)

**Pollutant:** Toxaphene

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MU - Municipal & Domestic, WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2 on

1998 303d list)

**Pollutant:** Toxicity

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Toxicity TMDL was approved by the RWQCB in July of 2005 and subsequently approved by

USEPA.

Water Segment: Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo

Crk Reaches 2 & 3, and lower Conejo Crk/Arroyo Conejo N Fk on 1998 303d

list)

**Pollutant:** Ammonia

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff
Recommendation:

After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

implementation plan. USEPA approved the TMDL on June 20, 2003.

Water Segment: Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo

Crk Reaches 2 & 3, and lower Conejo Crk/Arroyo Conejo N Fk on 1998 303d

list)

Pollutant: ChemA

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use GW - Groundwater Recharge, MU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo

Crk Reaches 2 & 3, and lower Conejo Crk/Arroyo Conejo N Fk on 1998 303d

list)

**Pollutant:** DDT

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use GW - Groundwater Recharge, MU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo

Crk Reaches 2 & 3, and lower Conejo Crk/Arroyo Conejo N Fk on 1998 303d

list)

Pollutant: Endosulfan

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use GW - Groundwater Recharge, MU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo

Crk Reaches 2 & 3, and lower Conejo Crk/Arroyo Conejo N Fk on 1998 303d

list)

**Pollutant:** Nitrogen, Nitrite

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Five of 42 water samples exceeded the water quality objective. However, a

TMDL is in place to address this pollutant in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and

an implementation plan has been approved.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: GW - Groundwater Recharge

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: Waters shall not exceed 10 mg/L nitrogen as nitrate-nitrogen plus nitrite-nitrogen (NO2-N), 45 mg/L as nitrate (NO3), 10 mg/L as

nitrate-nitrogen (NO3-N), or 1 mg/L nitrite-nitrogen (NO2-N) or as

otherwise designated in [another part of the Basin Plan].

Data Used to Assess Water

Quality:

Forty-two water samples, 5 samples exceeding (SWRCB, 2003).

Spatial Representation: One site.

Temporal Representation: Summer, fall, winter spring.

Environmental Conditions: Data 2-5 years old, data measured at site, data measured during all

seasons.

Data Quality Assessment: NPDES Program and Calleguas Creek Ambient Water Quality Monitoring

Program

Line of Evidence Remedial Program in Place

Beneficial Use CO - Cold Freshwater Habitat, MU - Municipal & Domestic

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

implementation plan. USEPA approved the TMDL on June 20, 2003.

Water Segment: Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo

Crk Reaches 2 & 3, and lower Conejo Crk/Arroyo Conejo N Fk on 1998 303d

list)

**Pollutant:** Toxaphene

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use GW - Groundwater Recharge, MU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo

Crk Reaches 2 & 3, and lower Conejo Crk/Arroyo Conejo N Fk on 1998 303d

list)

**Pollutant:** Toxicity

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water

segment-pollutant combination. The Calleguas Creek Toxicity TMDL was approved by the RWQCB in July of 2005 and subsequently approved by

USEPA.

Water Segment: Calleguas Creek Reach 11 (Arroyo Santa Rosa, was part of Conejo Creek

Reach 3 on 1998 303d list)

**Pollutant:** Ammonia

**Decision:** List in Being Addressed Category

Weight of Evidence: This water quality condition is being considered for listing under Water Quality

limited segment being addressed (section 2.2) of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess

listing status.

One line of evidence is available in the administrative record to assess this water body condition. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Qualitative excess algal growth information is backed by nutrient data and is sufficient to support continued placement on the section 303(d) list

(Listing Policy section 4.7).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and

an implementation plan has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

implementation plan. USEPA approved the TMDL on June 20, 2003.

Water Segment: Calleguas Creek Reach 11 (Arroyo Santa Rosa, was part of Conejo Creek

Reach 3 on 1998 303d list)

Pollutant: ChemA

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides

TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 11 (Arroyo Santa Rosa, was part of Conejo Creek

Reach 3 on 1998 303d list)

**Pollutant:** DDT

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 11 (Arroyo Santa Rosa, was part of Conejo Creek

Reach 3 on 1998 303d list)

**Pollutant:** Endosulfan

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 11 (Arroyo Santa Rosa, was part of Conejo Creek

Reach 3 on 1998 303d list)

**Pollutant:** Sedimentation/Siltation

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 11 (Arroyo Santa Rosa, was part of Conejo Creek

Reach 3 on 1998 303d list)

**Pollutant:** Toxaphene

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 11 (Arroyo Santa Rosa, was part of Conejo Creek

Reach 3 on 1998 303d list)

**Pollutant:** Toxicity

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Toxicity TMDL was approved by the RWQCB in July of 2005 and subsequently approved by

USEPA.

Water Segment: Calleguas Creek Reach 12 (was Conejo Creek/Arroyo Conejo North Fork on

1998 303d list)

**Pollutant:** Ammonia

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff concludes that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303 (d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

implementation plan. USEPA approved the TMDL on June 20, 2003.

Water Segment: Calleguas Creek Reach 12 (was Conejo Creek/Arroyo Conejo North Fork on

1998 303d list)

**Pollutant:** Chlordane

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 12 (was Conejo Creek/Arroyo Conejo North Fork on

1998 303d list)

**Pollutant:** DDT

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 13 (Conejo Creek South Fork, was Conejo Cr Reach

4 and part of Reach 3 on 1998 303d list)

**Pollutant:** Ammonia

**Decision:** List in Being Addressed Category

Weight of Evidence: This water quality condition is being considered for listing under Water Quality

limited segment being addressed (section 2.2) of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess

listing status.

One line of evidence is available in the administrative record to assess this water body condition. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Qualitative excess algal growth information is backed by nutrient data and is sufficient to support continued placement on the section 303(d) list

(Listing Policy section 4.7).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and

an implementation plan has been approved.

Lines of Evidence:

**Line of Evidence** Remedial Program in Place

Beneficial Use CO - Cold Freshwater Habitat, MU - Municipal & Domestic

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

implementation plan. USEPA approved the TMDL on June 20, 2003.

Water Segment: Calleguas Creek Reach 13 (Conejo Creek South Fork, was Conejo Cr Reach

4 and part of Reach 3 on 1998 303d list)

Pollutant: ChemA

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides

TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 13 (Conejo Creek South Fork, was Conejo Cr Reach

4 and part of Reach 3 on 1998 303d list)

**Pollutant:** DDT

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 13 (Conejo Creek South Fork, was Conejo Cr Reach

4 and part of Reach 3 on 1998 303d list)

**Pollutant:** Endosulfan

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 13 (Conejo Creek South Fork, was Conejo Cr Reach

4 and part of Reach 3 on 1998 303d list)

**Pollutant:** Toxaphene

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Calleguas Creek Reach 13 (Conejo Creek South Fork, was Conejo Cr Reach

4 and part of Reach 3 on 1998 303d list)

**Pollutant:** Toxicity

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Toxicity TMDL was

approved by the RWQCB in July of 2005 and subsequently approved by

USEPA.

Water Segment: Carbon Beach

**Pollutant:** Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Available data shows that standards are currently not being met but a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This

listing will substitute the previous listing for beach closures.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA. This listing will substitute the

previous listing for beach closures.

#### Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR1 - Water Contact Recreation

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

approved by USEPA on June 19, 2003.

Water Segment: Castlerock Beach Pollutant: Indicator Bacteria

Decision: List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity (section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant (coliform) should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

#### Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and

approved by USEPA on June 19, 2003.

Water Segment: Compton Creek

**Pollutant:** Copper

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Metals/Toxics TMDL was approved by the RWQCB in 2005 and subsequently approved

by USEPA in 2005.

Water Segment: Compton Creek

Pollutant: Lead

Decision: List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segmentpollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Metals/Toxics TMDL was approved by the RWQCB in 2005 and subsequently approved

by USEPA in 2005.

Water Segment: Compton Creek

**Pollutant:** pH

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to

result in attainment of the standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR2 - Non-Contact Recreation

Beneficial Use R2 - Non-Contact Recrea

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently

approved by USEPA on March 18, 2004.

Water Segment: Coyote Creek

**Pollutant:** Ammonia

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under sections 2.2 and 3.1 of the Listing Policy. Under each of these sections of the Policy, a minimum of one

line of evidence is needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. A remedial program other than a TMDL has been developed, approved, and is being implemented. This program is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle. Data collected since the initiation of the remedial program show that the ammonia water quality objective is not met.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Ten of 18 samples exceeded the ammonia water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because standards are not met and a program is in place to address this water quality problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: In order to protect aquatic life, ammonia concentrations in inland surface waters characteristic of freshwater shall not exceed the values calculated for the appropriate instream conditions [both pH and temperature] shown in Tables 3-1 to 3-3 [in the Basin Plan] (per U.S. EPA's most recent

criteria guidance document, '1999 Update of Ambient Water Quality

Criteria for Ammonia').

Data Used to Assess Water

Quality:

Based on 30-day average concentrations of ammonia, 10 samples out of 18 total samples exceed the ammonia objective. Ambient measurements of pH and temperature (30-day averages) were used to calculate the

water quality objective (LACSD, 2004a).

Spatial Representation: Three stations.

Temporal Representation: Samples were collected from June 2003 through November 2004. New

management practices were begun at the beginning of this period and may have resulted in a change in water quality. Water quality measurements collected before the implementation of management measures were not considered representative of current conditions.

Data Quality Assessment: NPDES quality assurance.

#### Line of Evidence

Beneficial Use

Information Used to Assess Water Quality:

Remedial Program in Place

WA - Warm Freshwater Habitat

An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this Reach. In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.

Research facility operation shows that the monthly average ammonia concentration will fully comply with the chronic ammonia objective that are

expected to be applicable in June 2003.

It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. It is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants is much lower than downstream concentrations (up to an order of magnitude difference).

Water Segment: Dan Blocker Memorial (Coral) Beach

**Pollutant:** Coliform Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination

was moved off the section 303(d) list during the 2002 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry

Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

approved by USEPA on June 19, 2003.

Water Segment: Dockweiler Beach

**Pollutant:** Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This listing will substitute the previous

listing for beach closures.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

previous listing for beach closures.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant (coliform) should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved. This listing will substitute the

#### Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

approved by USEPA on June 19, 2003.

Water Segment: Dry Canyon Creek

**Pollutant:** Selenium

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use WI - Wildlife Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Metals/Toxics TMDL was approved by the RWQCB in 2005 and subsequently approved

by USEPA in 2005.

Water Segment: Duck Pond Agricultural Drains/Mugu Drain/Oxnard Drain No 2

Pollutant: ChemA

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MU - Municipal & Domestic

Data Used to Assess Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

by USEPA.

Water Segment: Duck Pond Agricultural Drains/Mugu Drain/Oxnard Drain No 2

**Pollutant:** Chlordane

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of

the Policy.

3. Two out of 2 samples exceeded the OEHHA screening value. However, a

TMDL is in place to address this pollutant in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to

aguatic life or human health.

Evaluation Guideline: OEHHA Screening Value 30 ng/g for chlordane (total).

Data Used to Assess Water

Quality:

Two out of 2 samples exceeded. A total of 2 filet composite samples of goldfish and brown bullhead were collected. Goldfish sample was collected in 1993 and brown bullhead was collected in 1994. The guideline was exceeded in both samples. In addition, one whole fish sample of fathead minnow was collected in 1994 and exceeded the

guideline (TSMP, 2002).

Spatial Representation: One station located above culvert in Oxnard Drain #2 at Perimeter Road

crossing.

Temporal Representation: Samples were collected annually 1993-94.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides

TMDL was approved by the RWQCB in 2005 and subsequently approved

by USEPA.

Water Segment: Duck Pond Agricultural Drains/Mugu Drain/Oxnard Drain No 2

Pollutant: DDT

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two out of 2 samples exceeded the screening value. However, a TMDL is in place to address this pollutant in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to

aquatic life or human health.

Evaluation Guideline: OEHHA Screening Value: 100 ng/g for DDT

Data Used to Assess Water

Quality:

Two out of 2 samples exceeded (note: Whole fish sample of fathead minnow exceeded NAS Guideline in 1994). A filet composite sample of goldfish and one individual sample of brown bullhead were collected.

Goldfish were collected in 1993 while brown bullhead were collected in 1994. The guideline was exceeded in both samples (TSMP, 2002).

Spatial Representation: One station located above culvert in Oxnard Drain 2 at Perimeter Road

crossing.

Temporal Representation: Samples were collected in 1993-94.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water

segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

by USEPA.

Water Segment: Duck Pond Agricultural Drains/Mugu Drain/Oxnard Drain No 2

Pollutant: Nitrogen

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff concludes that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

implementation plan. USEPA approved the TMDL on June 20, 2003.

Water Segment: Duck Pond Agricultural Drains/Mugu Drain/Oxnard Drain No 2

**Pollutant:** Sediment Toxicity

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

by USEPA.

Water Segment: Duck Pond Agricultural Drains/Mugu Drain/Oxnard Drain No 2

**Pollutant:** Toxaphene

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two out of 2 samples exceeded the OEHHA screening value. However, a TMDL is in place to address this pollutant in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to

aguatic life or human health.

Evaluation Guideline: OEHHA Screening Value: 30 ng/g for toxaphene.

Data Used to Assess Water

Quality:

Two out of 2 samples exceeded. A total of 2 filet composite samples of goldfish and brown bullhead were collected. Goldfish sample was collected in 1993 and brown bullhead was collected in 1994. The guideline was exceeded in both samples. In addition, one whole fish sample of fathead minnow was collected in 1994 and exceeded the NAS

Guideline (TSMP, 2002).

Spatial Representation: One station located above culvert in Oxnard Drain #2 at Perimeter Road

crossing.

Temporal Representation: Samples were collected annually 1993-94.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides

TMDL was approved by the RWQCB in 2005 and subsequently approved

by USEPA.

Water Segment: Duck Pond Agricultural Drains/Mugu Drain/Oxnard Drain No 2

**Pollutant:** Toxicity

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Toxicity TMDL was approved by the RWQCB in July of 2005 and subsequently approved by

USEPA.

Water Segment: Escondido Beach Pollutant: Indicator Bacteria

Decision: List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Available data shows that standards are currently not being met but a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This listing will substitute the previous listing for beach closures.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA. This listing will substitute the previous listing for beach closures.

#### Lines of Evidence:

Line of Evidence Remedial Program in Place Beneficial Use R1 - Water Contact Recreation

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Flat Rock Point Beach Area

**Pollutant:** Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Available data shows that standards are currently not being met but a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This listing will substitute the previous listing for beach closures.

Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA. This listing will substitute the previous listing for beach closures.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR1 - Water Contact Recreation

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Fox Barranca (tributary to Calleguas Creek Reach 6)

**Pollutant:** Nitrate and Nitrite

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff concludes that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303 (d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

implementation plan. USEPA approved the TMDL on June 20, 2003.

Water Segment: Hermosa Beach

**Pollutant:** Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of

the Policy.

3. The AB 411 exceedance frequency was exceeded 6 out of the 6 years. However, a TMDL is in place to address this pollutant in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA. This listing will substitute the previous listing for beach closures.

#### Lines of Evidence:

Numeric Line of Evidence Narrative Description Data

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Site-specific AB 411 Exceedance Frequency (April- October) per Santa

Monica Bay Beaches Bacteria TMDL.

Data Used to Assess Water

Quality:

Public health monitoring data collected by two local agencies from 2000-

2005 and compliance monitoring for the Santa Monica Bay Beaches Bacteria TMDL collected from November 2004 to September 2005. The AB 411 exceedance frequency was exceeded 6 out of the 6 years (Heal

the Bay, 2006).

Spatial Representation: Hermosa City Beach at 26th Street and Hermosa Beach Pier 50 yards

south.

Temporal Representation: Samples collected between 2000 and 2005.

Data Quality Assessment: Data were collected by Los Angeles County Sanitation Department and

Los Angeles County Department of Health Services.

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess A TMDL and implementation plan has been approved for this water Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry

segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Inspiration Point Beach

Pollutant: Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Available data shows that standards are currently not being met but a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This

listing will substitute the previous listing for beach closures.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA. This listing will substitute the

previous listing for beach closures.

#### Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR1 - Water Contact Recreation

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: La Costa Beach

**Pollutant:** Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Available data shows that standards are currently not being met but a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This

listing will substitute the previous listing for beach closures.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA. This listing will substitute the

previous listing for beach closures.

#### Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR1 - Water Contact Recreation

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Pollutant:

Water Segment: Las Flores Beach

**Decision:** List in Being Addressed Category

Coliform Bacteria

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity (section 2 of the Listing Policy).

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

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

#### Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and

Pollutant:

Water Segment: Las Tunas Beach

**Decision:** List in Being Addressed Category

Indicator Bacteria

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Available data shows that standards are currently not being met but a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This listing will substitute the previous listing for beach closures.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

**SWRCB Staff**After review of the available data and information for this recommendation, **Recommendation:**SWRCB staff conclude that the water body should be placed in the Water

Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA. This listing will substitute the

previous listing for beach closures.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR1 - Water Contact Recreation

Data Used to Assess Water A TMDL and implementation

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Las Virgenes Creek

**Pollutant:** Coliform Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Malibu Creek Watershed Bacteria

TMDL was approved by USEPA in January of 2006.

Water Segment: Leo Carillo Beach (South of County Line)

Pollutant: Coliform Bacteria

Decision: List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity (section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant (coliform) should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

#### Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Lindero Creek Reach 1

**Pollutant:** Coliform Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Malibu Creek Watershed Bacteria

TMDL was approved by USEPA in January of 2006.

Water Segment: Lindero Creek Reach 2 (Above Lake)

**Pollutant:** Coliform Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Malibu Creek Watershed Bacteria

TMDL was approved by USEPA in January of 2006.

Water Segment: Long Point Beach

**Pollutant:** Coliform Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination

was moved off the section 303(d) list during the 2002 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant (coliform) should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an

implementation plan has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry

Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Los Angeles Harbor - Inner Cabrillo Beach Area

Pollutant: Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.2 of the Listing Policy. Under section 3.2 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A large number of samples exceed the water quality objective. This listing will substitute for the previous listing for beach closures for this water body.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Of the 3,362 samples, 1,729 exceeded the bacteriological standard and this exceeds the allowable frequency of the Listing Policy. However, a TMDL has been developed with an implementation plan that is expected to achieve water quality standards.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA. This listing will substitute for the previous listing for beach closures for this water body.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports areas shall be as follows: (1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area

shall not exceed:

(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total

coliform bacteria exceeds 0.1; or

(B) 10,000 total coliform bacteria per 100 milliliters; or

(C) 400 fecal coliform bacteria per 100 milliliters; or

(D) 104 enterococcus bacteria per 100 milliliters (LARWQCB, 1995)

Data Used to Assess Water Of the 3,362 samples, 1,729 exceed the standards (Anderson et al., 1998; LARWQCB, 2004f).

Spatial Representation: Two shoreline stations.

Quality:

Temporal Representation: Samples were collected between April 1998 and December 2002.

Los Angeles Harbor Bacteria TMDL -- Inner Cabrillo Beach and Main Data Quality Assessment:

Ship Channel. April 30, 2004.

Water Segment: Los Angeles River Reach 1 (Estuary to Carson Street)

**Pollutant:** Ammonia

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to

result in attainment of the standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently

approved by USEPA on March 18, 2004.

Water Segment: Los Angeles River Reach 1 (Estuary to Carson Street)

**Pollutant:** Copper

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. There are eighteen water samples with 11 samples exceeding the CTR criteria. However, a TMDL is in place to address this pollutant in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: CTRs are applicable to Aquatic Life.

Data Used to Assess Water

Quality:

Eighteen water samples, 11 samples exceeding (acute), 13 samples

exceeding

(chronic) (LACDWP, 2004c).

Spatial Representation: Samples were collected mostly in the main stem of Los Angeles River.

Temporal Representation: Fall, winter, and spring (1997-1999).

Environmental Conditions: Data 2-5 years old, data measured in the water body, sample taken

different

seasons and years.

QA/QC Equivalent: Los Angeles County Stormwater Program

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Metals/Toxics TMDL was approved by the RWQCB in 2005 and subsequently approved

by USEPA in 2005.

Water Segment: Los Angeles River Reach 1 (Estuary to Carson Street)

Pollutant: Lead

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MU - Municipal & Domestic, WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Metals/Toxics TMDL was approved by the RWQCB in 2005 and subsequently approved

by USEPA in 2005.

Water Segment: Los Angeles River Reach 1 (Estuary to Carson Street)

**Pollutant:** Nutrients (Algae)

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

Other related lines of evidence are available in the administrative record to assess this pollutant. A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004. This TMDL will address this water body condition. The approved implementation plan is expected to result in attainment of the standard. The nutrients (algae), foam, and odor information should not be placed on the section 303(d) list because is not a pollutant or toxicity (section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved by USEPA and an

implementation plan has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004. This TMDL will address this

water body condition.

Los Angeles River Reach 1 (Estuary to Carson Street) Water Segment:

Pollutant: Zinc

Decision: List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under sections 4.1 of the Listing

> Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segmentpollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. There are eighteen water samples with 7 samples exceeding the CTR

criteria. However, a TMDL is in place to address this pollutant in this water 4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information. SWRCB staff concludes that the water body-pollutant combination should be placed on the Water Quality Limited Segments Being Addressed category of the section 303(d) list

because a TMDL has been approved.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat, MI - Fish Migration, RA -

> Rare & Endangered Species, SA - Saline Water Habitat, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

CTRs are applicable to Aquatic Life.

Data Used to Assess Water

Quality:

Eighteen water samples, 7 samples exceeding (acute and chronic

criteria) (LACDPW, 2003).

Spatial Representation: Samples were collected mainly in the main stem of the LA River.

Temporal Representation: Fall, winter in different years.

Environmental Conditions: Data 2-5 years old, data measured in water body, sample taken different

seasons and years.

QA/QC Equivalent: Los Angeles County Stormwater Program

Line of Evidence Remedial Program in Place

Beneficial Use ES - Estuarine Habitat, MA - Marine Habitat, MI - Fish Migration, RA -

Rare & Endangered Species, SA - Saline Water Habitat, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Metals/Toxics

TMDL was approved by the RWQCB in 2005 and subsequently approved

by USEPA in 2005.

Water Segment: Los Angeles River Reach 1 (Estuary to Carson Street)

**Pollutant:** pH

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant (pH) should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an

implementation plan has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently

approved by USEPA on March 18, 2004.

Water Segment: Los Angeles River Reach 2 (Carson to Figueroa Street)

**Pollutant:** Ammonia

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently

approved by USEPA on March 18, 2004.

Water Segment: Los Angeles River Reach 2 (Carson to Figueroa Street)

Pollutant: Lead

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Metals/Toxics TMDL was approved by the RWQCB in 2005 and subsequently approved

by USEPA in 2005.

Water Segment: Los Angeles River Reach 2 (Carson to Figueroa Street)

**Pollutant:** Nutrients (Algae)

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

The Los Angeles River Nitrogen TMDL was approved by RWQCB on August, 2003 and subsequently approved by USEPA on March 2004 and this TMDL is expected to address this water body condition. This listing will substitute the

previous listings for odors and scum/foam-unnatural.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed in the Water Quality Limited Segments Being Addressed section of the 303(d) list because a TMDL is in place and is expected to address this condition. This listing will

substitute the previous listings for odors and scum/foam-unnatural.

### Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseWA - Warm Freshwater Habitat

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004. This TMDL will address this

water body condition.

Water Segment: Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)

**Pollutant:** Ammonia

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to

result in attainment of the standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Information Used to Assess Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently

approved by USEPA on March 18, 2004.

Water Segment: Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)

Pollutant: Nutrients (Algae)

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004. This TMDL will address this water body condition.

Water Segment: Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)

**Pollutant:** Ammonia

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved by USEPA and an

implementation plan has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR2 - Non-Contact Recreation

Denencial USE RZ - Non-Contact r

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently

approved by USEPA on March 18, 2004.

Water Segment: Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)

Pollutant: Lead

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Metals/Toxics TMDL was approved by the RWQCB in 2005 and subsequently approved

by USEPA on 2005.

Water Segment: Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)

**Pollutant:** Nutrients

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR2 - Non-Contact Recreation

Deficition USC 1/2 - Non-Contact Necreati

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004. This TMDL will address this water body condition.

Water Segment: Los Angeles River Reach 5 ( within Sepulveda Basin)

**Pollutant:** Ammonia

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The nutrient(algae), foam, and odor listings are backed by ammonia data. Nutrient(algae), foam, and odor information should not be placed on the section 303(d) list because they are not pollutants or toxicity (section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant (ammonia) should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

### Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseWA - Warm Freshwater Habitat

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently

approved by USEPA on March 18, 2004.

Water Segment: Los Angeles River Reach 5 (within Sepulveda Basin)

**Pollutant:** Nutrients (Algae)

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004. This TMDL will address this water body condition.

Water Segment: Lunada Bay Beach

**Pollutant:** Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Available data shows that standards are currently not being met but a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This

listing will substitute for the previous listing for beach closures.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA. This listing will substitute for the previous listing for beach closures.

#### Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR1 - Water Contact Recreation

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

approved by USEPA on June 19, 2003.

Water Segment: Malaga Cove Beach

**Pollutant:** Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. Two lines of evidence are available in the

administrative record to assess this pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The AB 411 exceedance frequency was exceeded 4 out of the 6 years. However, a TMDL is in place to address this pollutant in this water body. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA. This listing will substitute for the previous listing for beach closures.

previous listing for beac

#### Lines of Evidence:

Numeric Line of Evidence Narrative Description Data

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Site-specific AB 411 Exceedance Frequency (April- October) per Santa

Monica Bay Beaches Bacteria TMDL.

Data Used to Assess Water

Quality:

Public health monitoring data collected by two local agencies from 2000-2005 and compliance monitoring for the Santa Monica Bay Beaches

Bacteria TMDL collected from November 2004 to September 2005. The AB 411 exceedance frequency was exceeded 4 out of the 6 years (Heal

the Bay, 2006).

Spatial Representation: Malaga Cove, Palos Verdes Estates.

Temporal Representation: Samples were collected from 2000 to 2005.

Data Quality Assessment: Data were collected by Los Angeles County Sanitation Department and

Los Angeles County Department of Health Services.

Line of Evidence Remedial Program in Place

Water Quality:

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess A TMDL and implementation plan has been approved for this water

segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

approved by USEPA on June 19, 2003.

Water Segment: Malibu Beach

**Pollutant:** Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. Two lines of evidence are available in the

administrative record to assess this pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The AB 411 exceedance frequency was exceeded 6 out of the 6 years. However, a TMDL is in place to address this pollutant in this water body. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA. This listing will substitute for the previous listing for beach closures.

### Lines of Evidence:

**Numeric Line of Evidence** Narrative Description Data

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Site-specific AB 411 Exceedance Frequency (April- October) per Santa

Monica Bay Beaches Bacteria TMDL.

Data Used to Assess Water

Quality:

Public health monitoring data was collected by two local agencies from 2000-2005 and compliance monitoring for the Santa Monica Bay

Beaches Bacteria TMDL collected from November 2004 to September 2005. The AB 411 exceedance frequency was exceeded 6 out of the 6

years (Heal the Bay, 2006).

Spatial Representation: Malibu Point.

Temporal Representation: Samples collected between 2000 and 2005.

Data Quality Assessment: Data were collected by County Department of Health Services.

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

approved by USEPA on June 19, 2003.

Water Segment: Malibu Creek

**Pollutant:** Coliform Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Malibu Creek Watershed Bacteria

TMDL was approved by USEPA in January of 2006.

Water Segment: Malibu Lagoon

**Pollutant:** Coliform Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Malibu Creek Watershed Bacteria

TMDL was approved by USEPA in January of 2006.

Water Segment: Malibu Lagoon Beach (Surfrider)

**Pollutant:** Coliform Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Available data shows that standards are currently not being met but a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This listing will substitute for the previous listing for beach closures.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body - pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved. This listing replaces the previous listing for coliform bacteria.

#### Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

approved by USEPA on June 19, 2003.

Water Segment: Manhattan Beach Pollutant: Indicator Bacteria

Decision: List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

> Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. Two lines of evidence are available in the

administrative record to assess this pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segmentpollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The AB 411 exceedance frequency was exceeded 6 out of the 6 years. However, a TMDL is in place to address this pollutant in this water body. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation. SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA. This listing will substitute for the previous listing for beach closures.

#### Lines of Evidence:

Numeric Line of Evidence Narrative Description Data

Beneficial Use: R1 - Water Contact Recreation

Matrix:

Site-specific AB 411 Exceedance Frequency (April- October) per Santa Water Quality Objective/ Water Quality Criterion: Monica Bay Beaches Bacteria TMDL.

Data Used to Assess Water

Quality:

Public health monitoring data was collected by two local agencies from 2000-2005 and compliance monitoring for the Santa Monica Bay Beaches Bacteria TMDL collected from November 2004 to September 2005. The AB 411 exceedance frequency was exceeded 6 out of the 6

years (Heal the Bay, 2006).

Manhattan State Beach at 40th Street, Manhattan Beach-projection of Spatial Representation:

27th Street, Manhattan Beach Pier 50-yards south.

Temporal Representation: Samples were collected between 2000 and 2005.

Data Quality Assessment: Data were collected by Los Angeles County Sanitation Department and

Los Angeles County Department of Health Services.

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

approved by USEPA on June 19, 2003.

Water Segment: Marina del Rey Harbor - Back Basins

Pollutant: Chlordane

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Marina del Rey Toxics TMDL was approved by the RWQCB in October of 2005 and subsequently approved

by USEPA.

Water Segment: Marina del Rey Harbor - Back Basins

Pollutant: Copper

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MA - Marine Habitat

Water Segment: Marina del Rey Harbor - Back Basins

**Pollutant:** DDT

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for removal from the 303(d) List under

section 4.5 and 4.6 of the Listing Policy.

Five lines of evidence are available in the administrative record to assess this pollutant. Two of 4 samples exceed the OEHHA screening value. However, a TMDL is in place to address this pollutant in this water body.

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

This conclusion is based on the staff findings that:

1. There is no sediment quality guideline that complies with the requirements of section 6.1.3 of the Policy with which to assess the sediment data, but sediment toxicity is observed.

- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. Two out of 4 samples exceeded the OEHHA Screening Value for fish tissue and a TMDL is in place to address this pollutant in this water body.

  5. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: CM - Commercial and Sport Fishing (CA), WI - Wildlife Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:

-Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally.

-Protecting food supplies for fish and wildlife,

-Protecting reproductive and nursery areas, and

-Protecting wildlife corridors.

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

Evaluation Guideline: A sediment quality guideline is not available that satisfies the conditions

established in section 6.1.3 of the Listing Policy.

Data Used to Assess Water

Quality:

Ten samples ranging in concentration from 33.96 ppb to 97 ppb

(Anderson, et al., 1998).

Spatial Representation: Samples were collected synoptically with toxicity samples.

Temporal Representation: Summer-winter 1993, summer 1996, fall-winter 1997.

Data Quality Assessment: BPTCP QAPP.

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA), WI - Wildlife Habitat

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to

aguatic life or human health.

Evaluation Guideline: 100 ng/g - OEHHA Screening Value (Brodberg and Pollock, 1999).

Data Used to Assess Water

Quality:

Two out of 4 samples exceeded. A total of 3 filet composite samples of white croaker, yellowfin croaker, and round stingray along with an individual sample of sargo were collected. White croaker was collected in 1993. All others were collected in 1995. The guideline was exceeded in white croaker and sargo. Yellowfin croaker and round stingray did not

exceed the guideline (TSMP, 2002).

Spatial Representation: One station located about midway between the boat ramp and the

entrance to the ocean.

Temporal Representation: Samples were collected on 6/22/93 and 6/28/95.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat, WI - Wildlife Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: Existing habitats and associated populations of wetlands

fauna and flora shall be maintained by:

-Maintaining substrate characteristics necessary to support flora and

fauna which would be present naturally,
-Protecting food supplies for fish and wildlife,

-Protecting reproductive and nursery areas, and

-Protecting wildlife corridors.

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

Evaluation Guideline: BPTCP reference envelope approach used.

Data Used to Assess Water

Quality:

Seven samples, 6 samples considered toxic (Anderson et al., 1998).

Spatial Representation: Samples were collected synoptically with sediment samples.

Temporal Representation: Summer-winter 1993, summer 1996, fall-winter 1997.

Data Quality Assessment: BPTCP QAPP.

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA), WI - Wildlife Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Marina del Rey Toxics TMDL was approved by the RWQCB in October of 2005 and subsequently approved

by USEPA.

Line of Evidence Remedial Program in Place

Beneficial Use MA - Marine Habitat, WI - Wildlife Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Marina del Rey Toxics TMDL was approved by the RWQCB in October of 2005 and subsequently approved

by USEPA.

Water Segment: Marina del Rey Harbor - Back Basins

**Pollutant:** Dieldrin

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for removal from the 303(d) List under

section 4.5 and 4.6 of the Listing Policy.

Two lines of evidence are available in the administrative record to assess this pollutant. Two of 4 samples exceed the OEHHA screening value. However, a TMDL is in place to address this pollutant in this water body.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two out of 4 samples exceeded the OEHHA screening value. However, a TMDL is in place to address this pollutant in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved.

### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to

aquatic life or human health.

Evaluation Guideline: 2 ng/g - OEHHA Screening Value.

Data Used to Assess Water Quality:

Two out of 4 samples exceeded. A total of 3 filet composite samples of white croaker, yellowfin croaker, and round stingray along with an individual sample of sargo were collected. White croaker was collected in 1993. All others were collected in 1995. The guideline was exceeded in

white croaker and sargo. Yellowfin croaker and round stingray did not

exceed the guideline (TSMP, 2002).

Spatial Representation: One station located about midway between the boat ramp and the

entrance to the ocean.

Temporal Representation: Samples were collected on 6/22/93 and 6/28/95.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Marina del Rey Toxics TMDL was approved by the RWQCB in October of 2005 and subsequently approved

by USEPA.

Water Segment: Marina del Rey Harbor - Back Basins

**Pollutant:** Fish Consumption Advisory

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Marina del Rey Toxics TMDL was approved by the RWQCB in October of 2005 and subsequently approved

by USEPA.

Water Segment: Marina del Rey Harbor - Back Basins

Pollutant: Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This listing will substitute the previous high coliform count listing.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved. This listing will substitute for the previous high coliform count listing.

### Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Marina del Rey Pathogens TMDL was approved by RWQCB on August 7, 2003 and subsequently

approved by USEPA on March 18, 2004.

Water Segment: Marina del Rey Harbor - Back Basins

Pollutant: Lead

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MA - Marine Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Marina del Rey Back Basins Metals

TMDL was approved by the RWQCB in October of 2005 and

subsequently approved by USEPA.

Water Segment: Marina del Rey Harbor - Back Basins

**Pollutant:** Polychlorinated biphenyls

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for removal from the 303(d) List under

section 4.5 and 4.6 of the Listing Policy.

Five lines of evidence are available in the administrative record to assess this pollutant. Two of 4 samples exceed the OEHHA screening value. However, a TMDL is in place to address this pollutant in this water body.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.

- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. Three out of 4 samples exceeded the OEHHA Screening Value for fish tissue and, although none of the 18 sediment samples exceeded the criteria for PCBs, 6 samples were found to be toxic. However, a TMDL is in place to address this pollutant in this water body.
- 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved.

## Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at Water Quality Criterion: Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to

aquatic life or human health.

Evaluation Guideline: 20 ng/g - OEHHA Screening Value.

Data Used to Assess Water

Quality:

Three out of 4 samples exceeded. A total of 3 filet composite samples of white croaker, yellowfin croaker, and round stingray along with an individual sample of sargo were collected. White croaker was collected in 1993. All others were collected in 1995. The guideline was exceeded in white croaker, sargo, and yellowfin croaker. Round stingray did not

exceed the guideline (TSMP, 2002).

Spatial Representation: One station located about midway between the boat ramp and the

entrance to the ocean.

Temporal Representation: Samples were collected on 6/22/93 and 6/28/95.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: MA - Marine Habitat, WI - Wildlife Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: Existing habitats and associated populations of wetlands

fauna and flora shall be maintained by:

-Maintaining substrate characteristics necessary to support flora and

fauna which would be present naturally,
-Protecting food supplies for fish and wildlife,
-Protecting reproductive and nursery areas, and

-Protecting wildlife corridors.

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

Evaluation Guideline: Sediment Quality Guideline: 400 μg/g (McDonald et al., 2000).

Data Used to Assess Water

Quality:

18 sediment samples with none exceeding the sediment quality

guideline.

Spatial Representation: Samples were collected synoptically with toxicity samples.

Temporal Representation: Summer-winter 1993, summer 1996, fall-winter 1997.

Data Quality Assessment: BPTCP and TSMP QAPPs.

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat, WI - Wildlife Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: Existing habitats and associated populations of wetlands

fauna and flora shall be maintained by:

-Maintaining substrate characteristics necessary to support flora and

fauna which would be present naturally,
-Protecting food supplies for fish and wildlife,

-Protecting food supplies for fish and wildlife,
-Protecting reproductive and nursery areas, and

-Protecting wildlife corridors.

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

Evaluation Guideline: BPTCP reference envelope approach used.

Data Used to Assess Water

Quality:

Seven samples, 6 samples considered toxic (Anderson et al., 1998).

Spatial Representation: Samples were collected synoptically with sediment samples.

Temporal Representation: Summer-winter 1993, summer 1996, fall-winter 1997.

Data Quality Assessment: BPTCP QAPP.

Line of Evidence Remedial Program in Place

Beneficial Use MA - Marine Habitat, WI - Wildlife Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Marina del Rey Toxics TMDL was approved by the RWQCB in October of 2005 and subsequently approved

by USEPA.

Line of Evidence Remedial Program in Place

Beneficial Use MA - Marine Habitat, WI - Wildlife Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Marina del Rey Toxics TMDL was approved by the RWQCB in October of 2005 and subsequently approved

by USEPA.

Water Segment: Marina del Rey Harbor - Back Basins

**Pollutant:** Sediment Toxicity

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for removal on the section 303(d) list under

section 4.6 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess listing status.

riecessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. A sufficient number of samples exceed the BPTCP reference envelope evaluation guideline. However, a TMDL is in place to address

toxicity in this water body.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Six of seven samples exceeded the BPTCP reference envelope evaluation guideline. However, a TMDL is in place to address toxicity in this water body.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved.

### Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat, WI - Wildlife Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:

-Maintaining substrate characteristics necessary to support flora and

fauna which would be present naturally,
-Protecting food supplies for fish and wildlife.

-Protecting reproductive and nursery areas, and

-Protecting wildlife corridors.

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

Evaluation Guideline: BPTCP reference envelope approach used.

Data Used to Assess Water

Quality:

Seven samples, 6 samples considered toxic (Anderson et al., 1998).

Spatial Representation: Samples were collected synoptically with sediment samples.

Temporal Representation: Summer-winter 1993, summer 1996, fall-winter 1997.

Data Quality Assessment: BPTCP QAPP.

Line of Evidence Remedial Program in Place

Beneficial Use MA - Marine Habitat, WI - Wildlife Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Marina del Rey Toxics TMDL was approved by the RWQCB in October of 2005 and subsequently approved

by USEPA.

Water Segment: Marina del Rey Harbor - Back Basins

**Pollutant:** Zinc

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MA - Marine Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Marina del Rey Back Basins Metals

TMDL was approved by the RWQCB in October of 2005 and

subsequently approved by USEPA.

Water Segment: Marina del Rey Harbor Beach

**Pollutant:** Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity. This listing will substitute the beach closures and high coliform count listings for this water body.

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

SWRCB Staff

Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body-pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved. This listing will substitute the beach

closures and high coliform count listings for this water body.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Marina del Rey Pathogens TMDL was approved by RWQCB on August 7, 2003 and subsequently

approved by USEPA on March 18, 2004.

Water Segment: McCoy Canyon Creek

**Pollutant:** Selenium

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence -N/A

Beneficial Use GW - Groundwater Recharge

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Metals/Toxics

TMDL was approved by the RWQCB in 2005 and subsequently approved

by USEPA in 2005.

Water Segment: McGrath Beach

**Pollutant:** Coliform Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA. The TMDL is being implemented through a Cleanup and Abatement Order and is expected to result in attainment of the standard by

2006.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list

because a TMDL has been approved by USEPA and a Cleanup and

Abatement Order has been approved implementing the TMDL.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL was approved by USEPA on November 20, 2003. The RWQCB

is implementing the TMDL through a Cleanup and Abatement Order.

Water Segment: Medea Creek Reach 1 (Lake to Confl. with Lindero)

**Pollutant:** Coliform Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Malibu Creek Watershed Bacteria

TMDL was approved by USEPA in January of 2006.

Water Segment: Medea Creek Reach 2 (Abv Confl. with Lindero)

**Pollutant:** Coliform Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Malibu Creek Watershed Bacteria

TMDL was approved by USEPA in January of 2006.

Water Segment: Monrovia Canyon Creek

Pollutant: Lead

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use WE - Wetland Habitat, WI - Wildlife Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Metals/Toxics TMDL was approved by the RWQCB in 2005 and subsequently approved

Nicholas Canyon Beach Water Segment:

Pollutant: Indicator Bacteria

Decision: List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Available data shows that standards are currently not being met but a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This listing will substitute for the previous listing for beach closures.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. The AB 411 exceedance frequency was exceeded 4 out of the 6 years. However, a TMDL is in place to address this pollutant in this water body.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation. SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA. This listing will substitute for the previous listing for beach closures.

#### Lines of Evidence:

Numeric Line of Evidence Narrative Description Data Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

Site-specific AB 411 Exceedance Frequency (April to October) per Santa

Monica Bay Beaches Bacteria TMDL.

Data Used to Assess Water Quality:

Public health monitoring data and collected by two local agencies from 2000-2005 and compliance monitoring for the Santa Monica Bay

Beaches Bacteria TMDL collected from November 2004 to September 2005. The AB 411 exceedance frequency was exceeded 4 out of the 6

years (Heal the Bay, 2006).

Spatial Representation: One hundred feet west of the lifeguard tower.

Temporal Representation: Samples were collected between 2000 and 2005.

Data Quality Assessment: Data were collected by County Department of Health Services.

Line of Evidence Remedial Program in Place

Water Quality:

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess A TMDL and implementation plan has been approved for this water

segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Palo Comado Creek

**Pollutant:** Coliform Bacteria

**Decision:** List in Being Addressed Category

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Malibu Creek Watershed Bacteria

TMDL was approved by USEPA in January of 2006.

Water Segment: Palo Verde Shoreline Park Beach

Pollutant: Pathogens

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed by

RWQCB but it has not been approved by USEPA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Paradise Cove Beach

**Pollutant:** Fecal Coliform

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity (section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant (coliform) should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

#### Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and

Water Segment: Point Dume Beach

Pollutant: Indicator Bacteria

Decision: List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Available data shows that standards are currently not being met but a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This

listing will substitute for the previous listing for beach closures.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA. This listing will substitute for the previous listing for beach closures.

#### Lines of Evidence:

Line of Evidence Remedial Program in Place Beneficial Use R1 - Water Contact Recreation

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Point Fermin Park Beach

**Pollutant:** Total Coliform

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. Two lines of evidence are available in the

administrative record to assess this pollutant.

A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Data on total coliform show that there were 104 out of 458 samples exceeding the Basin Plan objective for total coliform. This listing will substitute for the previous listing of beach closures for this water body.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Out of 458 samples, 104 exceeded the basin plan objective. However, a TMDL is in place to address this pollutant in this water body.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because applicable water quality standards are not being met but there is a program in place to address the problem. This listing will substitute for the previous listing of beach closures for this water body.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan for the SHELL beneficial use: 70 MPN/100mL

Data Used to Assess Water

Quality:

Out of 458 samples, 104 exceeded the basin plan objective for Total

Coliform (LACSD, 2004b).

Spatial Representation: Samples were collected at Point Fermin Park Beach.

Temporal Representation: Samples were collected between 12/31/2001 and 4/29/2003.

Data Quality Assessment: LACSD

Line of Evidence

Remedial Program in Place

Beneficial Use

R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry

Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Point Vicente Beach

**Pollutant:** Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Available data shows that standards are currently not being met but a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This listing will substitute the previous listing for beach closures.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

**SWRCB Staff**After review of the available data and information for this recommendation,
SWRCB staff conclude that the water body should be placed in the Water

Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA. This listing will substitute for the

previous listing for beach closures.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR1 - Water Contact Recreation

Data Used to Assess Water A TMDL and implementation

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Portuguese Bend Beach

**Pollutant:** Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Available data shows that standards are currently not being met but a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This listing will substitute for the previous listing for beach closures.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The AB 411 exceedance frequency was exceeded 3 out of the 6 years. However, a TMDL is in place to address this pollutant in this water body. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA. This listing will substitute for the previous listing for beach closures.

#### Lines of Evidence:

Numeric Line of EvidenceNarrative Description DataBeneficial Use:R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Site-specific AB 411 Exceedance Frequency (April- October) per Santa

Monica Bay Beaches Bacteria TMDL.

Data Used to Assess Water Quality:

Public health monitoring data collected by two local agencies from 2000-2005 and compliance monitoring for the Santa Monica Bay Beaches Bacteria TMDL collected from November 2004 to September 2005. The

AB 411 exceedance frequency was exceeded 3 out of the 6 years (Heal

the Bay, 2006).

Spatial Representation: Portuguese Bend Cove, Rancho Palos Verdes.

Temporal Representation: Samples were collected between 2000-2005.

Data Quality Assessment: Data were collected by Los Angeles County Sanitation Department.

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and approved by USEPA on June 19, 2003.

Water Segment: Promenade Park Beach

**Pollutant:** Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle. Data also indicate that water quality standards are not met.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Eleven of 97 samples exceeded the water quality standard and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA, an implementation plan has been approved, and water quality standards are not met.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: 17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports

areas shall be as follows:

(1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area

shall not exceed:

(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total

coliform bacteria exceeds 0.1; or

(B) 10,000 total coliform bacteria per 100 milliliters; or (C) 400 fecal coliform bacteria per 100 milliliters; or

(D) 104 enterococcus bacteria per 100 milliliters.

Data Used to Assess Water

Quality:

97 samples, 11 sample exceeding (SWRCB, 2003).

Spatial Representation: 1 station: VC(14000). This station represents the beach 50 yards on

either

side of the sampling point. Data collected at Figueroa Street.

Temporal Representation: Data collected in 1999, 2000, and 2001.

Data Quality Assessment: County Health Department.

**Numeric Line of Evidence** Pol

Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: 17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports

areas shall be as follows:

(1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area

shall not exceed:

(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total

coliform bacteria exceeds 0.1; or

(B) 10,000 total coliform bacteria per 100 milliliters; or (C) 400 fecal coliform bacteria per 100 milliliters; or (D) 104 enterococcus bacteria per 100 milliliters.

Data Used to Assess Water

Quality:

94 samples, 14 samples exceeding (SWRCB, 2003).

Spatial Representation: 1 station: VC(15000). This station represents the beach 50 yards on

either

side of the sampling point. Data collected at Redwood Apartments.

Temporal Representation: Data collected in 1999, 2000, and 2001.

Data Quality Assessment: County Health Department.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: 17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports

areas shall be as follows:

(1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area

shall not exceed:

(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total

coliform bacteria exceeds 0.1; or

(B) 10,000 total coliform bacteria per 100 milliliters; or (C) 400 fecal coliform bacteria per 100 milliliters; or (D) 104 enterococcus bacteria per 100 milliliters.

Data Used to Assess Water

Quality:

99 samples, 14 samples exceeding (SWRCB, 2003).

Spatial Representation: 1 station: VC(16000). This station represents the beach 50 yards on

either

side of the sampling point. Data collected at Oak Street.

Data collected in 1999, 2000, and 2001. Temporal Representation:

Data Quality Assessment: County Health Department. QA/QC Equivalent: County Health Department.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports

areas shall be as follows:

(1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed:

(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total

coliform bacteria exceeds 0.1: or

(B) 10,000 total coliform bacteria per 100 milliliters; or (C) 400 fecal coliform bacteria per 100 milliliters; or (D) 104 enterococcus bacteria per 100 milliliters.

Data Used to Assess Water

Spatial Representation:

Quality:

105 samples, 19 samples exceeding (SWRCB, 2003).

1 station: VC(17000). This station represents the beach 50 yards on

either

side of the sampling point. Data collect Holiday Inn (south of drain at

California Street).

Temporal Representation: Data collected in 1999, 2000, and 2001.

Data Quality Assessment: County Health Department.

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Puerco Beach

**Pollutant:** Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Available data shows that standards are currently not being met but a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This listing will substitute for the previous listing for beach closures.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The AB 411 exceedance frequency was exceeded 4 out of the 6 years. However, a TMDL is in place to address this pollutant in this water body. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA. This listing will substitute for the previous listing for beach closures.

#### Lines of Evidence:

Numeric Line of EvidenceNarrative Description DataBeneficial Use:R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Site-specific AB 411 Exceedance Frequency (April - October) per Santa

Monica Bay Beaches Bacteria TMDL.

Data Used to Assess Water

Quality:

Public health monitoring data and collected by two local agencies from 2000-2005 and compliance monitoring for the Santa Monica Bay Beaches Bacteria TMDL collected from November 2004 to September

2005. The AB 411 exceedance frequency was exceeded 4 out of the 6

years (Heal the Bay, 2006).

Spatial Representation: Puerco Beach, 25500 PCH at the lifeguard station.

Temporal Representation: Samples were collected between 2000 and 2005.

Data Quality Assessment: Data were collected by Los Angeles County Department of Health

Services.

Line of Evidence Remedial Program in Place

Water Quality:

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess A TMDL and implementation plan has been approved for this water

segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet

Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Redondo Beach

**Pollutant:** Coliform Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity (section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant (coliform) should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

#### Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and

Water Segment: Resort Point Beach

**Pollutant:** Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Available data shows that standards are currently not being met but a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This

listing will substitute for the previous listing for beach closures.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA. This listing will substitute for the previous listing for beach closures.

#### Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR1 - Water Contact Recreation

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Rio Hondo Reach 1 (Confl. LA River to Snt Ana Fwy)

**Pollutant:** Copper

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use RA - Rare & Endangered Species, WE - Wetland Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Metals/Toxics

TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Rio Hondo Reach 1 (Confl. LA River to Snt Ana Fwy)

Pollutant: Lead

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use RA - Rare & Endangered Species, WE - Wetland Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Metals/Toxics TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Rio Hondo Reach 1 (Confl. LA River to Snt Ana Fwy)

**Pollutant:** Zinc

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use RA - Rare & Endangered Species, WE - Wetland Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Metals/Toxics

TMDL was approved by the RWQCB in 2005 and subsequently approved

Water Segment: Rio Hondo Reach 1 (Confl. LA River to Snt Ana Fwy)

**Pollutant:** pH

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to

result in attainment of the standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR2 - Non-Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently

approved by USEPA on March 18, 2004.

Water Segment: Royal Palms Beach

**Pollutant:** Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Available data shows that standards are currently not being met but a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This listing will substitute for the previous listing for beach closures.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The AB 411 exceedance frequency was exceeded 5 out of the 6 years. However, a TMDL is in place to address this pollutant in this water body. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA. This listing will substitute for the previous listing for beach closures.

#### Lines of Evidence:

Numeric Line of EvidenceNarrative Description DataBeneficial Use:R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Site-specific AB 411 Exceedance Frequency (April- October) per Santa

Monica Bay Beaches Bacteria TMDL.

Data Used to Assess Water

Quality:

Public health monitoring data collected by two local agencies from 2000-2005 and compliance monitoring for the Santa Monica Bay Beaches Bacteria TMDL collected from November 2004 to September 2005. The

AB 411 exceedance frequency was exceeded 5 out of the 6 years (Heal

the Bay, 2006).

Spatial Representation: Royal Palms State Beach.

Temporal Representation: Samples collected between 2000 and 2005.

Data Quality Assessment: Data were collected by Los Angeles County Sanitation Department.

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and

subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: San Gabriel River, East Fork

Pollutant: Trash

Decision: List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under sections 2.2 and 3.11 of the

Listing Policy. Under these sections of the Policy, a minimum of one line of

evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle only because a TMDL had been completed. No substantial evidence in the record

shows that standards are met.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MI - Fish Migration, R2 - Non-Contact Recreation, RA - Rare &

Endangered Species, SP - Fish Spawning, WA - Warm Freshwater

Habitat. WI - Wildlife Habitat

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water

segment-pollutant combination. The TMDL was approved by the RWQCB

in 1999 and subsequently approved by USEPA.

Water Segment: San Jose Creek Reach 1 (SG Confluence to Temple St.)

**Pollutant:** Ammonia

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Two out of 17 samples exceed the ammonia objective, however, a remedial program other than a TMDL has been developed, approved, and is being implemented. This program is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Two samples out of 17 total samples exceed the ammonia objective. However, a TMDL is in place to address this pollutant in this water body. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a program is in place to address this water quality problem.

# Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: In order to protect aquatic life, ammonia concentrations in inland surface waters characteristic of freshwater shall not exceed the values calculated for the appropriate instream conditions [both pH and temperature] shown in Tables 3-1 to 3-3 [in the Basin Plan] (per U.S. EPA's most recent criteria guidance document, '1999 Update of Ambient Water Quality Criteria for Ammonia').

Data Used to Assess Water

Quality:

Based on 30-day average concentrations of ammonia, 2 samples out of 17 total samples exceed the ammonia objective. Ambient measurements of pH and temperature (30-day averages) were used to calculate the

water quality objective (LACSD, 2004b).

Spatial Representation:

Five stations.

Temporal Representation:

Data were collected between July 2003 and November 2004.

Data Quality Assessment:

NPDES quality assurance.

#### Line of Evidence

Remedial Program in Place

Beneficial Use

WA - Warm Freshwater Habitat

Information Used to Assess Water Quality:

An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this Reach (SWRCB, 2003).

In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced. Research facility operation shows that the monthly average ammonia concentration will fully comply with the chronic ammonia objective that is expected to be applicable in June 2003.

It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. It is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants are much lower than downstream concentrations (up to an order of magnitude difference).

Water Segment: Santa Clara River Reach 3 (Freeman Diversion to A Street)

**Pollutant:** Ammonia

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination

was moved off the section 303(d) list during the 2002 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Clara River Nitrogen TMDL was approved by RWQCB on August 7, 2003 and subsequently

approved by USEPA on March 18, 2004.

Water Segment: Santa Clara River Reach 3 (Freeman Diversion to A Street)

**Pollutant:** Chloride

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use AG - Agricultural Supply, GW - Groundwater Recharge, MU - Municipal &

Domestic

Data Used to Assess Water

Quality:

The Santa Clara River Reach 3 Chloride TMDL and implementation plan has been approved for this water segment-pollutant combination. The

TMDL was approved by the RWQCB in 2002 and subsequently approved

by USEPA.

Water Segment: Santa Clara River Reach 5 (Blue Cut gaging station to West Pier Hwy 99

Bridge) (was named Santa Clara River Reach 7 on 2002 303(d) lists)

**Pollutant:** Chloride

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for delisting under section 4.1 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this

pollutant.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination in the Water Quality Limited Segments portion of the

section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Forty-five out of 53 samples exceed the water quality objective and this exceeds the allowable frequency in table 4.1.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed in the Being Addressed Category of Water Quality Limited Segments on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem, however, a TMDL is in place to address

the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Los Angeles Region site specific WQ Objective for Santa Clara River,

Reach 5 is 100 mg/L.

Data Used to Assess Water

Quality:

Forty-one of 46 samples exceeded the site specific objective (SWAMP,

2004).

Spatial Representation: One sample site.

Temporal Representation: Samples were collected from 1/11/2000 to 1/27/2005.

Environmental Conditions: Data Collected by the United Water Conservation District during 2000

and 2005. Station sampled is located at Blue Cut Gauging Station near

the county line.

Data Quality Assessment: United Water Conservation District QAPP.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Los Angeles Region site specific WQ Objective for Santa Clara River,

Reach 5 is 100 mg/L.

Data Used to Assess Water

Quality:

Seven water samples, four samples exceeding (SWAMP, 2004).

Spatial Representation: Seven stations.

Temporal Representation: Samples were collected in October and November of 2001.

Environmental Conditions: The Santa Clara River Reach 5 monitoring stations are located within the

Santa Clara River between West Pier Highway 99 and Blue Cut gauging

station. Stations were located on Castaic Creek and Blue Cut.

Data Quality Assessment: SWAMP Quality Assurance Plan.

Line of Evidence Remedial Program in Place

Beneficial Use AG - Agricultural Supply

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Clara River Chloride TMDL was approved by SWRCB in July 2004 and subsequently approved by the Office of Administrative Law on November 15, 2004, USEPA

approved the TMDL on May of 2005.

Water Segment: Santa Clara River Reach 6 (W Pier Hwy 99 to Bouquet Cyn Rd) (was named

Santa Clara River Reach 8 on 2002 303(d) lists)

**Pollutant:** Chloride

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed by the

RWQCB and was approved by USEPA in May 2005.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been developed and approved for implementation.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use AG - Agricultural Supply

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Clara River Chloride TMDL was approved by SWRCB in July 2004 and subsequently approved by the Office of Administrative Law on November 15, 2004. USEPA

approved the TMDL on May of 2005.

Water Segment: Santa Monica Beach

Pollutant: Indicator Bacteria

Decision: List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This listing will substitute for the previous

listings for beach closures and high coliform count.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant (coliform) should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved. This listing will substitute for the

previous listings for beach closures and high coliform count.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA), R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Santa Monica Canyon

Pollutant: Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle. This listing

will substitute for the previous listing for high coliform count.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved. This listing will substitute for the previous listing for high selferm pount.

coliform count.

### Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet

Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Sea Level Beach

**Pollutant:** Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Available data shows that standards are currently not being met but a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This listing will substitute for the previous listing for beach closures.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA. This listing will substitute for the previous listing for high coliform count.

#### Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR1 - Water Contact Recreation

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Stokes Creek

**Pollutant:** Coliform Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Malibu Creek Watershed Bacteria

TMDL was approved by USEPA in January of 2006.

Water Segment: Surfers Point at Seaside

**Pollutant:** Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination

was moved off the section 303(d) list during the 2002 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and

subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Topanga Beach

**Pollutant:** Coliform Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This listing will substitute for the previous

listing for beach closures.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant (coliform) should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved. This listing will substitute for the

previous listing for beach closures.

#### Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Torrance Beach

**Pollutant:** Coliform Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This listing will substitute the previous

listing for beach closures.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant (coliform) should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved. This listing will substitute for the

previous listing for beach closures.

#### Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Torrey Canyon Creek

Pollutant: Nitrate and Nitrite

Decision: List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to

result in attainment of the standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list

because a TMDL and implementation plan have been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use MU - Municipal & Domestic

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Clara Rive Nitrogen TMDL was approved by RWQCB on August 7, 2003 and subsequently

approved by USEPA on March 18, 2004.

Water Segment: Trancas Beach (Broad Beach)

**Pollutant:** Fecal Coliform

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This listing will substitute for the previous

listing for beach closures and high coliform count.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant (coliform) should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved. This listing will substitute for the

previous listing for beach closures and high coliform count.

#### Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Tujunga Wash (LA River to Hansen Dam)

**Pollutant:** Ammonia

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This listing will substitute for the previous listings for foam, floc.

scum, and taste and odor.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant (ammonia) should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved. This listing will substitute for the

previous listings for foam, floc, scum, and taste and odor.

#### Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseWA - Warm Freshwater Habitat

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently

approved by USEPA on March 18, 2004.

Water Segment: Tujunga Wash (LA River to Hansen Dam)

Pollutant: Copper

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the

standard.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section

303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Metals/Toxics TMDL was approved by the RWQCB in 2005 and subsequently approved

by USEPA in 2005.

Water Segment: Venice Beach

**Pollutant:** Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This listing will substitute for the previous listing for beach closures and high coliform count.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list. This listing will replace the previous listing for beach closures for this water body.

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. For total coliform, the criterion was exceeded in 696 of 1690 samples, for fecal coliform the criterion was exceeded 1 of 1701 samples, and for enterococcus 174 out of 1081 were in exceedance. However, a TMDL is in place to address this pollutant in this water body.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant (coliform) should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved. This listing will substitute for the previous listing for beach closures and high coliform count.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Evaluation Guideline: The most conservative applicable water quality criterion for total coliform

is 70 MPN/100mL for the Basin Plan SHELL 30-Day Median objective. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC-1 Marine 30-Day Minimum 5 samples objective. The most conservative applicable water quality criterion for enterococcus is 35 MPN/100mL for the Basin Plan REC-1

Marine 30-Day Minimum 5 samples objective.

Data Used to Assess Water

Quality:

The most conservative applicable water quality criterion for total coliform is 70 MPN/100mL for the Basin Plan SHELL 30-Day Median objective. In Venice Beach, the criterion was exceeded in 696 of 1690 samples, which is 41.2% of the sample events. Under the state's Listing Policy, a water body is considered to be impaired for total coliform if there are 281 or more exceedances out of the 1690 samples. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC-1 Marine 30-Day Minimum 5 samples objective. In Venice Beach, the criterion was exceeded in 1 of 1701 samples, which is 0.1% of the sample events. Under the state's Listing Policy, a water body is eligible for delisting for fecal coliform if there are 282 or fewer

exceedances out of the 1701 samples. The most conservative applicable water quality criterion for enterococcus is 35 MPN/100mL for the Basin Plan REC-1 Marine 30-Day Minimum 5 samples objective. In Venice Beach, the criterion was exceeded in 174 of 1081 samples, which is 16.1% of the sample events. Under the state's Listing Policy, a water body is eligible for delisting for enterococcus if there are 179 or fewer exceedances out of the 1081 samples (City of Los Angeles, Bureau of

Sanitation, 2006).

Spatial Representation: Venice Beach.

Data Quality Assessment: This data is taken verbatim from the City of Los Angeles, Bureau of

Sanitation comment letter on the draft 303(d) List.

Line of Evidence

Remedial Program in Place

Beneficial Use

R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and approved by USEPA on June 19, 2003.

Water Segment: Wheeler Canyon/Todd Barranca

**Pollutant:** Nitrate and Nitrite

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination

was moved off the section 303(d) list during the 2002 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseMU - Municipal & Domestic

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Clara River Nitrogen TMDL

was approved by RWQCB on August 7, 2003 and subsequently

approved by USEPA on March 18, 2004.

Water Segment: Whites Point Beach

**Pollutant:** Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Available data shows that standards are currently not being met but a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This listing will substitute for the previous listing for beach closures.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. The AB 411 exceedance frequency was exceeded 2 out of the 6 years. However, a TMDL is in place to address this pollutant in this water body. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

## SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA. This listing will substitute for the previous listing for beach closures.

#### Lines of Evidence:

Numeric Line of EvidenceNarrative Description DataBeneficial Use:R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Site-specific AB 411 Exceedance Frequency (April- October) per Santa Water Quality Criterion: Monica Bay Beaches Bacteria TMDL.

Data Used to Assess Water

Quality:

Public health monitoring data collected by two local agencies from 2000-2005 and compliance monitoring for the Santa Monica Bay Beaches

Bacteria TMDL collected from November 2004 to September 2005. The AB 411 exceedance frequency was exceeded 2 out of the 6 years (Heal

the Bay, 2006).

Spatial Representation: Wilder Annex, San Pedro.

Temporal Representation: Samples collected between 2000 and 2005.

Data Quality Assessment: Data were collected by Los Angeles County Sanitation Department and

Los Angeles County Department of Health Services.

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Will Rogers Beach

**Pollutant:** Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This listing will substitute for the previous listing for beach closures and high coliform count.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. For total coliform, the criterion was exceeded in 1,061 of 1,910 samples, for fecal coliform the criterion was exceeded 0 of 1,993 samples, and for enterococcus 203 of 706 were in exceedance. However, a TMDL is in place to address this pollutant in this water body.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

### SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant (coliform) should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved. This listing will substitute for the previous listing for beach closures and high coliform count.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Evaluation Guideline: The most conservative applicable water quality criterion for total coliform

is 70 MPN/100mL for the Basin Plan SHELL 30-Day Median objective. The most conservative applicable water quality criterion for enterococcus

is 35 MPN/100mL for the Basin Plan REC-1 Marine 30-Day Minimum 5 samples objective. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC-1 Marine 30-Day Minimum 5 samples objective.

Data Used to Assess Water Quality:

The most conservative applicable water quality criterion for total coliform is 70 MPN/100mL for the Basin Plan SHELL 30-Day Median objective. In Will Rogers Beach, the criterion was exceeded in 1,061 of 1,910 samples, which is 55.6% of the sample events. Under the state's Listing Policy, a water body is considered to be impaired for total coliform if there are 317 or more exceedances out of the 1,910 samples. The most conservative applicable water quality criterion for enterococcus is 35 MPN/100mL for the Basin Plan REC-1 Marine 30-Day Minimum 5 samples objective. In Will Rogers Beach, the criterion was exceeded in 203 of 706 samples, which is 28.8% of the sample events. Under the state's Listing Policy, a water body is considered to be impaired for enterococcus if there are 118 or more exceedances out of the 706 samples. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC-1 Marine 30-Day Minimum 5 samples objective. In Will Rogers Beach, the criterion was exceeded in 0 of 1.993 samples, which is 0% of the sample events. Under the state's Listing Policy, a water body is eligible for delisting for fecal coliform if there are 330 or fewer exceedances out of the 1,993 samples (City of Los Angeles, Bureau of Sanitation, 2006).

Spatial Representation:

Will Rogers Beach.

Data Quality Assessment:

This was taken verbatim from the City of Los Angeles Bureau of

Sanitation comment letter on the draft 303(d) List.

Line of Evidence

Remedial Program in Place

Beneficial Use

R1 - Water Contact Recreation

Information Used to Assess Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and approved by USEPA on June 19, 2003.

Water Segment: Zuma Beach (Westward Beach)

**Pollutant:** Indicator Bacteria

**Decision:** List in Being Addressed Category

Weight of Evidence: This pollutant is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Available data shows that standards are currently not being met but a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This listing will substitute for the previous listing for beach closures.

Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

**SWRCB Staff**After review of the available data and information for this recommendation,
SWRCB staff conclude that the water body should be placed in the Water

Quality Limited Segments Being Addressed category of the section 303(d) list because data show exceedances of water quality standards and a TMDL has been developed and approved by USEPA. This listing will substitute for the

previous listing for beach closures.

Lines of Evidence:

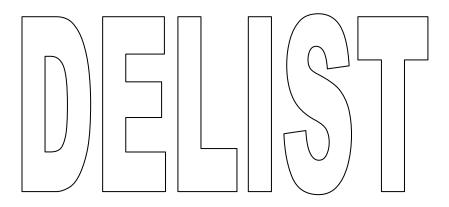
Line of EvidenceRemedial Program in PlaceBeneficial UseR1 - Water Contact Recreation

Data Used to Assess Water A T

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

# Los Angeles Region (4)



Recommendations to remove waters and pollutants from the section 303(d) List

Water Segment: Arroyo Seco Reach 2 (Figueroa St. to Riverside Dr.)

Pollutant: Excess Algal Growth

**Decision:** Delist

Weight of Evidence: After review of the available data and information for this recommendation,

SWRCB staff conclude that the water body should not be placed in the Water Quality Limited Segments category of the section 303(d) list because excess algal growth is not a pollutant and it is uncertain if the growth data are backed

by pollutant data showing exceedances of water quality standards.

One line of evidence is available in the administrative record to assess this water body condition. A nitrogen TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the nitrogen standard. Qualitative information on excess algal growth alone is not sufficient to support placement on the section 303(d) list (Listing Policy section 3.7). It is expected that this TMDL will address the

pollutant(s) contributing to or causing this condition.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be removed from the Water Quality Limited Segments category of the section 303(d) list because algae is not pollutants, but rather a condition. It is expected that this TMDL will address

the pollutant(s) contributing to or causing this condition.

**Lines of Evidence:** 

Line of Evidence Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation

water body condition.

Information Used to Assess Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004. This TMDL will address this

Water Segment: Ashland Avenue Drain

Pollutant: Coliform Bacteria

**Decision:** Delist

Weight of Evidence: Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list (listing was for

'high coliform count' on the 2002 list).

This conclusion is based on the staff findings that Ashland Avenue Drain is an enclosed storm water conveyance. Enclosed storm water conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain itself and as such, should not be listed

as impaired.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because there are no beneficial uses or applicable water quality

standards for this water body.

Lines of Evidence:

Line of Evidence Narrative Description Data

Beneficial Use AG - Agricultural Supply

Data Used to Assess Water Quality:

Ashland Avenue Drain is an enclosed stormwater conveyance. Enclosed stormwater conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain

itself and as such, should not be listed as impaired.

Water Segment: Ashland Avenue Drain

Pollutant: Organic Enrichment/Low Dissolved Oxygen

**Decision:** Delist

Weight of Evidence: Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that Ashland Avenue Drain is an enclosed storm water conveyance. Enclosed storm water conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain itself and as such, should not be listed

as impaired.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because there are no beneficial uses or applicable water quality

standards for this water body.

Lines of Evidence:

Line of Evidence Narrative Description Data

Beneficial Use AG - Agricultural Supply

Data Used to Assess Water Quality:

Ashland Avenue Drain is an enclosed stormwater conveyance. Enclosed stormwater conveyance drains do not have designated beneficial uses in the Basic Plan, and therefore, no criteria apply to waters within the drain.

the Basin Plan, and therefore, no criteria apply to waters within the drain

itself and as such, should not be listed as impaired.

Water Segment: Ashland Avenue Drain

Pollutant: Toxicity

**Decision:** Delist

Weight of Evidence: Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that Ashland Avenue Drain is an enclosed storm water conveyance. Enclosed storm water conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain itself and as such, should not be listed

as impaired.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because there are no beneficial uses or applicable water quality

standards for this water body.

Lines of Evidence:

Line of Evidence Narrative Description Data

Beneficial Use AG - Agricultural Supply

Data Used to Assess Water Quality:

Ashland Avenue Drain is an enclosed stormwater conveyance. Enclosed stormwater conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain

itself and as such, should not be listed as impaired.

**Ballona Creek Water Segment:** 

ChemA Pollutant: Delist Decision:

Weight of Evidence:

This pollutant is being considered for delisting under section 4.1 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. This water body was originally listed in error as the samples used to place it on the list in 1998 were not from this water body. Based on this data, it appears that this water body should never have been on the 303(d) list for this pollutant.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

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

#### Lines of Evidence:

Line of Evidence Pollutant-Tissue

**Beneficial Use** CM - Commercial and Sport Fishing (CA)

Information Used to **Assess Water Quality:**  To assess potential impairments associated with contaminant concentrations in fish and shellfish tissue, summary information that formed the basis for the 1998 303(d) list was reviewed. Tissue data used in the assessment were from the State Mussel Watch Program in the mid-1980s and data collected as part of the Toxic Substances Monitoring Program (TSMP) in 1993. A review of the original data sets revealed that both sets of data were from locations in Ballona Creek Estuary. There are no data on fish tissue or mussel tissue for Ballona Creek.

Consequently the Ballona Creek listing for this pollutant in tissue was made in error.

Water Segment: Ballona Creek

Pollutant: Chlordane

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under section 4.1 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the Water Quality Limited Segments

portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. This water body was originally listed in error as the samples used to place it on the list in 1998 were not from this water body. Based on this data, it appears that this water body should never have been on the 303(d) list for this pollutant.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

# SWRCB Staff Recommendation:

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

## Lines of Evidence:

Line of Evidence Pollutant-Tissue

**Beneficial Use** CM - Commercial and Sport Fishing (CA), WA - Warm Freshwater

Habitat

Information Used to Assess Water Quality:

To assess potential impairments associated with contaminant concentrations in fish and shellfish tissue, summary information that formed the basis for the 1998 303(d) list was reviewed. Tissue data used in the assessment were from the State Mussel Watch Program in the mid-1980s and data collected as part of the Toxic Substances Monitoring Program (TSMP) in 1993. A review of the original data sets revealed that both sets of data were from locations in Ballona Creek Estuary. There are no data on fish tissue or mussel tissue for Ballona Creek.

Consequently the Ballona Creek listing for this pollutant in tissue was

made in error.

Water Segment: Ballona Creek

Pollutant: DDT

Decision: Delist

Weight of Evidence: This pollutant is being considered for delisting under section 4.1 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the Water Quality Limited Segments

portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. This water body was originally listed in error as the samples used to place it on the list in 1998 were not from this water body. Based on this data, it appears that this water body should never have been on the 303(d) list for this pollutant.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

# SWRCB Staff Recommendation:

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

## Lines of Evidence:

Line of Evidence Pollutant-Tissue

Beneficial Use CM - Commercial and Sport Fishing (CA), WA - Warm Freshwater

Habitat

Information Used to Assess Water Quality:

To assess potential impairments associated with contaminant concentrations in fish and shellfish tissue, summary information that formed the basis for the 1998 303(d) list was reviewed. Tissue data used in the assessment were from the State Mussel Watch Program in the mid-1980s and data collected as part of the Toxic Substances Monitoring Program (TSMP) in 1993. A review of the original data sets revealed that both sets of data were from locations in Ballona Creek Estuary. There are no data on fish tissue or mussel tissue for Ballona Creek.

Consequently the Ballona Creek listing for this pollutant in tissue was

made in error (SWAMP, 2004).

Water Segment: Ballona Creek

Pollutant: Dieldrin

Decision: Delist

Weight of Evidence: This pollutant is being considered for delisting under section 4.1 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. This water body was originally listed in error as the samples used to place it on the list in 1998 were not from this water body. Based on this data, it appears that this water body should never have been on the 303(d) list for this pollutant.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

# SWRCB Staff Recommendation:

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

## Lines of Evidence:

Line of Evidence Pollutant-Tissue

**Beneficial Use** CM - Commercial and Sport Fishing (CA), WA - Warm Freshwater

Habitat

Information Used to Assess Water Quality:

To assess potential impairments associated with contaminant concentrations in fish and shellfish tissue, summary information that formed the basis for the 1998 303(d) list was reviewed. Tissue data used in the assessment were from the State Mussel Watch Program in the mid-1980s and data collected as part of the Toxic Substances Monitoring Program (TSMP) in 1993. A review of the original data sets revealed that both sets of data were from locations in Ballona Creek Estuary. There are no data on fish tissue or mussel tissue for Ballona Creek.

Consequently the Ballona Creek listing for this pollutant in tissue was

made in error.

Decision:

Water Segment: Ballona Creek

Delist

Pollutant: Lead

\_\_\_\_\_

Weight of Evidence:

This pollutant is being considered for delisting under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category. There is a TMDL in place for this pollutant in this water body, but data shows that standards are being met.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Six out of 90 samples exceeded the CTR criterion for lead and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

## **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

CTR Lead Criterion for continuous concentration in water for the protection of aquatic life is expressed as a function of the total hardness of the water body. The aquatic life criteria will vary depending on total hardness reported.

Data Used to Assess Water Quality:

Numeric data generated from 22 samples taken from 10/12/00 to 4/30/03 at one to two-week sampling intervals. One (1) sample exceeded the Lead Continuous Criterion Concentration, which equals the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects (LACDPW, 2004c).

**Spatial Representation:** One sample site sampled during the dry and wet season beginning from

10/12/00 through 4/30/03 at approximately one to two week intervals.

**Temporal Representation:** Twenty-two (22) samples where taken during the wet and dry season

from 10/12/00 to 4/30/03 at approximately one to two week intervals as part of the Los Angeles County Storm water monitoring program prepared by the Los Angeles County Department of Public Works.

Environmental Conditions:

The Ballona Creek monitoring station is located at the existing stream gauge station (Stream Gauge No. F38C-R) between Sawtelle Boulevard and Sepulveda Boulevard in the City of Los Angeles. At this location, which was chosen to avoid tidal influences, the upstream tributary watershed of Ballona Creek is 88.8 square miles. The entire Ballona Creek Watershed is 127.1 square miles. At the gauging station, Ballona

Creek is a concrete lined trapezoidal channel.

**Data Quality Assessment:** Evaluation of Analytes and QA/QC Specifications for Monitoring Program

(Woodward-Clyde, 1996) Los Angeles County Department of Public

Works.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: CTR Lead Criterion for continuous concentration in water for the protection of aquatic life is expressed as a function of the total hardness of the water body. The aquatic life criteria will vary depending on total hardness reported.

**Data Used to Assess** 

Water Quality:

Thirty-eight water samples, 5 above chronic criterion (SWRCB, 2003).

**Spatial Representation:** Samples collected spatially along Ballona Creek. **Temporal Representation:** Fall, winter, spring, summer in different years.

Environmental Conditions:

Data is 1-5 years old.

Conditions.

**Data Quality Assessment:** Los Angeles County Stormwater Program.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

CTR Lead Criterion for continuous concentration in water for the protection of aquatic life is expressed as a function of the total hardness of the water body. The aquatic life criteria will vary depending on total hardness reported. The criterion is linked and applicable for the

protection of aquatic life Beneficial Uses.

Data Used to Assess Water Quality:

Seven of 48 measurements were analyzed. The dry weather detection limits in the City of Los Angeles data exceeded the water quality criterion and this precluded evaluation against the CTR standards. The detection limit was 10  $\mu$ g/L (USEPA and LARWQCB, 2005).

**Spatial Representation:** The metals data from the City of Los Angeles were from four locations

along Ballona Creek at National Boulevard, Overland Avenue, Centinela Boulevard, and Pacific Avenue. The data from National and Overland Boulevards are representative of Ballona Creek Reaches 1 and 2,

respectively.

Temporal Representation: Sampled on a monthly basis between January 2002 through May 2003.

Environmental Conditions:

Samples are representative of dry-weather conditions. A hardness value

of 300 mg/L was used to calculate the water quality criterion.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: CTR Lead Criterion for continuous concentration in water for the protection of aquatic life is expressed as a function of the total hardness of the water body. The aquatic life criteria will vary depending on total

hardness reported.

Data Used to Assess Water Quality:

None of 30 measurements exceeded the water criterion. The detection

limit is 5 µg/L (USEPA and LARWQCB, 2003).

**Spatial Representation:** The metals data from SCCWRP were from a characterization study of

Ballona Creek and Estuary to identify relative metals contributions of runoff discharges during dry conditions. Sampling occurred at 12 instream sites and at the discharge of 35-40 storm drains (number depended on whether there was flow from the drain on the sampling day). Nine of the instream sites were from the Creek and three of the instream sites were from the estuary. One of the storm drains was

Considered Considered Channel and this data was word to access and the

Sepulveda Canyon Channel and this data was used to assess conditions

for that listed reach.

Temporal Representation: Sampling was conducted on May 17, July 16, and September 24, 2003.

Environmental Conditions:

Samples are representative of dry-weather conditions. A hardness value

of 300 mg/L was used to calculate the water quality criterion.

Data Quality Assessment: Southern California Coastal Water Research Project.

Line of EvidenceRemedial Program in PlaceBeneficial UseWA - Warm Freshwater Habitat

**Data Used to Assess** 

Water Quality:

The Ballona Creek Metals TMDL has been approved by the Regional

Board in 7/2005 and by USEPA in 12/2005.

Water Segment: Ballona Creek

Pollutant: PCBs (dioxin-like)

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under section 4.1 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the Water Quality Limited Segments

portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. This water body was originally listed in error as the samples used to place it on the list in 1998 were not from this water body. Based on this data, it appears that this water body should never have been on the 303(d) list for this pollutant.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

## Lines of Evidence:

Line of Evidence Pollutant-Tissue

Beneficial Use CM - Commercial and Sport Fishing (CA), WA - Warm Freshwater

Habitat

Information Used to Assess Water Quality:

To assess potential impairments associated with contaminant concentrations in fish and shellfish tissue, summary information that formed the basis for the 1998 303(d) list was reviewed. Tissue data used in the assessment were from the State Mussel Watch Program in the mid-1980s and data collected as part of the Toxic Substances Monitoring Program (TSMP) in 1993. A review of the original data sets revealed that both sets of data were from locations in Ballona Creek Estuary. There are no data on fish tissue or mussel tissue for Ballona Creek.

Consequently the Ballona Creek listing for this pollutant in tissue was

made in error.

Water Segment: Ballona Creek

Pollutant: Sediment Toxicity

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under section 4.6 of the Listing

Policy. One line of evidence is available in the administrative record to assess

this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the Water Quality Limited Segments

portion of the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. This water body was originally listed in error as the samples used to place it on the 303(d) list in 1998 were not from this water body. There is not enough information available to keep this water body on the 303(d) list for sediment toxicity.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Line of Evidence Pollutant-Sediment

Beneficial Use WA - Warm Freshwater Habitat

Information Used to Assess Water Quality:

The water body was originally listed in error. There is a discrepancy in the nomenclature used to define Ballona Creek and the Estuary. In the Basin Plan, the transition between Creek and Estuary is at Centinela Blvd. Ballona Creek (above Centinela) is concrete-lined. Ballona Creek estuary (below Centinela) is soft-bottomed. In 1998, samples were inadvertently attributed to Ballona Creek but were actually collected from Ballona Creek Estuary. Sediment data used in the 1998 list appear to have been collected from soft-bottomed estuary sediments as opposed to the concrete-lined channel. Therefore, the listing for this pollutant in Ballona Creek was made in error.

Water Segment: Ballona Creek

Pollutant: Selenium

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Five numeric lines of evidence

are available in the administrative record to assess this pollutant.

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

Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of

the Policy.

3. Six of 102 samples exceeded the CTR Selenium criterion. And this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

exceeded.

#### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

CTR Criteria Continuous Concentration of 5  $\mu$ g/L is the highest concentration of Selenium to which aquatic life can be exposed for an extended period of time (four days) without deleterious effects applicable

to protect aquatic life BUs.

Data Used to Assess

Water Quality:

Numeric data generated from 22 samples taken from 10/12/00 to 4/30/03 at one to two-week sampling intervals. One (1) sample exceeded the CTR Selenium Continuous Criterion Concentration (LACDPW, 2004c).

**Spatial Representation:** One sample site sampled during the dry and wet season beginning from 10/12/00 through 4/30/03 at approximately one to two week intervals.

Temporal Representation: Twenty-two (22) samples where taken during the wet and dry season

from 10/12/00 to 4/30/03 at approximately one to two week intervals as part of the Los Angeles County Storm water monitoring program prepared by the Los Angeles County Department of Public Works.

Environmental Conditions:

The Ballona Creek monitoring station is located at the existing stream gauge station (Stream Gauge No. F38C-R) between Sawtelle Boulevard and Sepulveda Boulevard in the City of Los Angeles. At this location, which was chosen to avoid tidal influences, the upstream tributary watershed of Ballona Creek is 88.8 square miles. The entire Ballona Creek Watershed is 127.1 square miles. At the gauging station, Ballona Creek is a concrete lined trapezoidal channel.

OTCCK IS a COI

Data Quality Assessment: Evaluation of Analytes and QA/QC Specifications for Monitoring Program

(Woodward-Clyde, 1996) Los Angeles County Department of Public

Works.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: CTR Criteria Continuous Concentration of 5  $\mu$ g/L is the highest concentration of Selenium to which aquatic life can be exposed for an extended period of time (four days) without deleterious effects applicable

to protect aquatic life BUs.

**Data Used to Assess** 

Water Quality:

Twenty-five water samples, 3 samples exceeding (SWRCB, 2003).

**Spatial Representation:** One sample site sampled mostly during the wet season.

Temporal Representation: Samples collected from 1997 through 1999 in the fall, spring, summer,

and winter. Most samples collected during wet season.

**Data Quality Assessment:** Los Angeles County Department of Public Works.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: -N/A

Water Quality Objective/ Water Quality Criterion: CTR Criteria Continuous Concentration of 5  $\mu$ g/L is the highest concentration of Selenium to which aquatic life can be exposed for an extended period of time (four days) without deleterious effects applicable

to protect aquatic life BUs.

**Data Used to Assess** 

Water Quality:

Two measurements of 55 exceed the water quality criterion. Three measurements greater than detection limit (USEPA and LAWQCB,

2005).

**Spatial Representation:** One sampling location.

**Temporal Representation:** Samples collected between 1996 and 2002.

Environmental These are wet-weather data taken from the Ballona Creek Metals TMDL.

**Conditions:** These measurements overlap with other measurements collected by

LACDPW.

**Data Quality Assessment:** Los Angeles Count Department of Public Works.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

CTR Criteria Continuous Concentration of 5  $\mu$ g/L is the highest concentration of Selenium to which aquatic life can be exposed for an extended period of time (four days) without deleterious effects applicable

to protect aquatic life BUs.

Data Used to Assess

Water Quality:

No samples exceed the water quality criterion out of 30 samples. The detection limit was 100 µg/L (USEPA and LARWQCB, 2005).

**Spatial Representation:** The metals data from SCCWRP were from a characterization study of

Ballona Creek and Estuary to identify relative metals contributions of runoff discharges during dry conditions. Twelve in-stream sites and at the discharge of 35-40 storm drains were sampled (number depended on whether there was flow from the drain on the sampling day). Nine of the in-stream sites were from the Creek and three of the in-stream sites were from the estuary. One of the storm drains was Sepulveda Canyon Channel and this data was used to assess conditions for that listed

reach.

Temporal Representation: Sampling was conducted on May 17, July 16, and September 24, 2003.

Environmental Conditions:

Samples represent dry-weather conditions.

Conditions:

Data Quality Assessment: Southern California Coastal Water Research Project.

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

**Data Used to Assess** 

Water Quality:

The Ballona Creek Metals TMDL has been approved by the Regional

Board in 7/2005 and by USEPA in 12/2005.

Ballona Creek **Water Segment:** 

Zinc Pollutant:

Delist Decision:

This pollutant is being considered for removal from the section 303(d) list Weight of Evidence:

under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Four numeric lines of evidence

are available in the administrative record to assess this pollutant.

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

Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Nine of 154 samples exceeded the CTR Zinc criterion. And this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

WA - Warm Freshwater Habitat Beneficial Use:

Water Matrix:

Water Quality Objective/ **Water Quality Criterion:** 

CTR Zinc Criterion for continuous concentration in water for the protection of aquatic life is expressed as a function of the total hardness of the water body. The aquatic life criteria will vary depending of total hardness reported. The criterion is linked and applicable for the

protection of aquatic life Beneficial Uses.

**Data Used to Assess** 

Water Quality:

Six of fifty-five water samples exceeded the CTR criterion (USEPA and

LAWQCB, 2005).

To assess wet-weather conditions, evaluated dissolved metals and **Spatial Representation:** 

hardness data collected from Ballona Creek by the LACDPW storm water

program at Sawtelle Boulevard.

Temporal Representation: Samples collected 1996 to 2000.

The storm water data were compared to the freshwater CTR values **Environmental** 

based on the actual hardness measured for each sample. Conditions:

**Data Quality Assessment:** Los Angeles County Department of Public Works.

Numeric Line of Evidence Pollutant-Water

WA - Warm Freshwater Habitat Beneficial Use:

Matrix: Water

CTR Zinc Criterion for continuous concentration in water for the Water Quality Objective/ Water Quality Criterion:

protection of aquatic life is expressed as a function of the total hardness of the water body. The aquatic life criteria will vary depending of total hardness reported. The criterion is linked and applicable for the

protection of aquatic life Beneficial Uses.

**Data Used to Assess** 

Water Quality:

Numeric data generated from 22 samples taken from 10/12/00 to 4/30/03 at one to two-week sampling intervals. One (1) sample exceeded the Zinc Continuous Criterion Concentration, which equals the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects (LACDPW,

2004c; 2004d).

One sample site sampled during the dry and wet season beginning from **Spatial Representation:** 

10/12/00 through 4/30/03 at approximately one to two week intervals.

**Temporal Representation:** Twenty-two samples where taken during the wet and dry season from

10/12/00 to 4/30/03 at approximately one to two week intervals as part of the Los Angeles County Storm water monitoring program prepared by

the Los Angeles County Department of Public Works.

**Environmental** Conditions:

The Ballona Creek monitoring station is located at the existing stream gauge station (Stream Gauge No. F38C-R) between Sawtelle Boulevard and Sepulveda Boulevard in the City of Los Angeles. At this location, which was chosen to avoid tidal influences, the upstream tributary watershed of Ballona Creek is 88.8 square miles. The entire Ballona Creek Watershed is 127.1 square miles. At the gauging station, Ballona

Creek is a concrete lined trapezoidal channel.

Data Quality Assessment: Evaluation of Analytes and QA/QC Specifications for Monitoring Program

(Woodward-Clyde, 1996) Los Angeles County Department of Public

Works.

Numeric Line of Evidence Pollutant-Water

**Beneficial Use:** WA - Warm Freshwater Habitat

Water Matrix:

Water Quality Objective/

CTR Zinc Criterion for continuous concentration in water for the protection of aquatic life is expressed as a function of the total hardness **Water Quality Criterion:** 

of the water body. The aquatic life criteria will vary depending of total hardness reported. The criterion is linked and applicable for the

protection of aquatic life Beneficial Uses.

**Data Used to Assess** 

Water Quality:

Out of thirty samples, no measurements exceed the water quality criterion. Detection limit was 20 µg/L (USEPA and LARWQCB, 2005).

**Spatial Representation:** 

The metals data from SCCWRP were from a characterization study of Ballona Creek and Estuary to identify relative metals contributions of runoff discharges during dry conditions. A total of 70 samples, twelve instream sites and at the discharge of 35-40 storm drains were sampled (number depended on whether there was flow from the drain on the sampling day).

Temporal Representation: Sampling was conducted on May 17, July 16, and September 24, 2003.

**Environmental** Conditions:

Samples represent dry-weather conditions. The water quality criterion

was calculated with a hardness value of 300 mg/L.

Data Quality Assessment: Southern California Coastal Water Research Project.

Numeric Line of Evidence Pollutant-Water

WA - Warm Freshwater Habitat **Beneficial Use:** 

Matrix: Water

Water Quality Objective/ **Water Quality Criterion:** 

CTR Zinc Criterion for continuous concentration in water for the protection of aquatic life is expressed as a function of the total hardness of the water body. The aquatic life criteria will vary depending of total hardness reported. The criterion is linked and applicable for the protection of aquatic life Beneficial Uses.

**Data Used to Assess** 

Water Quality:

Out of forty-seven samples, 2 exceed the water quality criterion. Detection limit was 10 µg/L (USEPA and LARWQCB, 2005).

**Spatial Representation:** 

The metals data from the City of Los Angeles were from four locations along Ballona Creek at National Boulevard, Overland Avenue, Centinela Boulevard, and Pacific Avenue. The data from National and Overland Boulevards are representative of Ballona Creek Reaches 1 and 2. respectively.

Temporal Representation: Sampled on a monthly basis between January 2002 through May 2003.

Samples are representative of dry-weather conditions. A hardness value

**Environmental Conditions:** 

of 300 mg/L was used to calculate the water quality criterion.

Data Quality Assessment: City of Los Angeles.

Line of Evidence Remedial Program in Place **Beneficial Use** WA - Warm Freshwater Habitat

**Data Used to Assess** 

Water Quality:

The Ballona Creek Metals TMDL has been approved by the Regional Board in 7/2005 and by USEPA in 12/2005.

Water Segment: Bluff Cove Beach

Pollutant: Beach Closures

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under section 4 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. It is not known if the beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity

(section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303(d) Water Quality Limited Segment list because beach closures

are not pollutants.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because applicable beach closures are not a pollutant.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Data Used to Assess Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet

Weather TMDL was approved by RWQCB on December 12, 2002 and

approved by USEPA on June 19, 2003.

Water Segment: Burbank Western Channel

Pollutant: Ammonia

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.1 of the Listing Policy. Under section 4.1 a single line of

evidence is necessary to assess delisting status.

Three lines of evidence are available in the administrative record to assess this pollutant. Two water samples were in exceedance of the water quality objective for ammonia. A TMDL is in place and the water quality objectives are not being exceeded.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Two of 60 water samples exceeded the water quality objectives for ammonia and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

# SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: One hour average Basin Plan Water Quality Objectives for ammonia-N was revised in 2002. For freshwaters not designated cold freshwater habitat and/or fish migration, the ammonia WQO is dependent on pH and fish species, but not temperature. The 30-day average WQO for waters not designated for spawning are dependent on pH and temperature. These WQO's have been adopted into the Basin Plan and are linked and applicable to protection of aquatic life beneficial uses.

Data Used to Assess

Water Quality:

Two out of 33 samples exceeded Basin Plan Water Quality objectives for

ammonia-N, revised in 2002 (City of Burbank, 2006).

**Spatial Representation:** Samples were collected at three sites: R1-at the confluence of the

Burbank Western Channel and Lockheed Channel about 50 feet above the Burbank Water Reclamation Plant, R2- Burbank Western Wash at Verdugo Avenue, and R5- Burbank Western Wash just upstream from

the confluence with the Los Angeles River.

Temporal Representation: Three samples were taken on one day every third month starting on

5/6/2003 to 11/1/ 2005.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

One hour average Basin Plan Water Quality Objectives for ammonia-N was revised in 2002. For freshwaters not designated cold freshwater habitat and/or fish migration, the ammonia WQO is dependent on pH and fish species, but not temperature. The 30-day average WQO for waters not designated for spawning are dependent on pH and temperature. These WQO's have been adopted into the Basin Plan and are linked and

applicable to protection of aquatic life beneficial uses.

Data Used to Assess Water Quality:

Numeric data generated from 27 samples taken from 5/7/02 to 5/25/04 at two to three monthly intervals. No sample exceeded the Basin Plan ammonia WQO. Data was compared against 2002 adopted ammonia WQO of which the 1-hour average objective is dependent on pH and fish species and the 30-day average is dependent on pH and temperature. It was not possible to determine any exceedances of the 1-hour average WQO or the 30-day average because pH and temperature data was not provided (City of Burbank, 2004).

provided (City of Burbank, 2004).

**Spatial Representation:** Four sample sites sampled from May 2002 through May 2004 at two to

three monthly intervals.

**Temporal Representation:** Twenty seven samples were taken at three sampling stations.

**Environmental** Conditions:

Data was collected from May 2002 through May 2004 at 3 sampling stations. Sampling station R1 is located at the confluence of Burbank Western Channel and Lockheed Channel about 50 feet above the Burbank Reclamation Plant. Station R2 is located at Burbank Western Wash at Verdugo Avenue. Station R5 is located at Burbank Western Wash just upstream from the confluence with the L.A. River.

**Data Quality Assessment:** Standard Operating Procedures for Receiving Water Monitoring, Burbank Western Channel (United Water Burbank Water Reclamation Plant).

Line of Evidence Remedial Program in Place **Beneficial Use** WA - Warm Freshwater Habitat

**Data Used to Assess** Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently

approved by USEPA on March 18, 2004.

Water Segment: Calleguas Creek Reach 1 (was Mugu Lagoon on 1998 303(d) list)

Pollutant: Zinc

Decision: Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.1 of the Listing Policy. Under section 4.1 a single line of

evidence is necessary to assess delisting status.

One line of evidence is available in the administrative record to assess this

pollutant.

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

Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 59 samples exceeded the water quality objective and this does not exceed the allowable frequency for delisting listed in Table 4.1 of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

Basin Plan: Surface waters shall not contain concentrations of chemical

exceeded.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: ES - Estuarine Habitat

Matrix: Water

Water Quality Objective/

Water Quality Criterion: constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** CTR for saltwater for dissolved zinc, 90 ppb (acute) and 81 ppb (chronic).

**Data Used to Assess** 

Water Quality:

Data submitted by Larry Walker and Associates on behalf of the Calleguas Creek Watershed Management Plan (CCWMP) showing 59 samples, none of which exceed the acute or chronic CTR criteria for dissolved zinc in saltwater. Data were collected for three monitoring programs; by the Navy, for Calleguas Creek Metals TMDL monitoring, and for the Calleguas Creek Characterization Study (CCWMP, 2006).

**Spatial Representation:** Various locations throughout the reach.

**Temporal Representation:** Samples were collected between 1994 and 2004.

Data Quality Assessment: Data were collected by the Navy and for the Calleguas Creek Metals

TMDL and Calleguas Creek Characterization Study.

Water Segment: Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998

303d list)

Pollutant: Excess Algal Growth

**Decision:** Delist

Weight of Evidence: This water quality condition is being considered for delisting under section 4 of

the Listing Policy. Under this section of the Policy, a minimum of one line of

evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this water body condition. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Qualitative information on excess algal growth alone is not sufficient to support continued placement on the section 303(d) list (Listing

Policy section 3.7).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the Water Quality Limited Segments

portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be removed from the Water Quality Limited Segments portion of the section 303(d) list because algal growth is not a pollutant and it is uncertain if the growth listing is backed by

pollutant data showing exceedances of water quality standards.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation

Information Used to Assess Water Quality:

A TMDL for this water segment-pollutant combination was approved by the RWQCB in October 2002. The TMDL has an approved

implementation plan. USEPA approved the TMDL on June 20, 2003. This

TMDL will address this water body condition.

Water Segment: Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998

303d list)

Pollutant: Nitrogen, Nitrite

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under sections 4.2 of the Listing

Policy. Under section 4.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record

to assess this pollutant.

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

Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Eighteen out of 110 samples exceeded the water quality objective, and these do not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

exceeded.

#### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: GW - Groundwater Recharge

Matrix: Water

Water Quality Objective/
Water Quality Criterion:

Basin Plan: Waters shall not exceed 10 mg/L nitrogen as nitrate-nitrogen plus nitrite-nitrogen (NO2-N), 45 mg/L as nitrate (NO3), 10 mg/L as nitrate-nitrogen (NO3-N) or as otherwise designated in another part of

the Basin Plan.

Data Used to Assess Water Quality:

Out of one-hundred and ten water samples, 18 samples exceeded the

water quality objective (SWRCB, 2003).

**Spatial Representation:** One site only (Conejo Creek). **Temporal Representation:** Summer, fall, winter, spring.

Data Quality Assessment: NPDES report.

Remedial Program in Place Line of Evidence MU - Municipal & Domestic **Beneficial Use** 

Information Used to **Assess Water Quality:**  A TMDL for this water segment-pollutant combination was approved by the RWQCB in October 2002. The TMDL has an approved

implementation plan. USEPA approved the TMDL on June 20, 2003.

Water Segment: Coyote Creek

Pollutant: Excess Algal Growth

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.7 of the Listing Policy. Under section 4.7 a single line of

evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Four of the samples were judged to exceed a subjective algae

ranking guideline.

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

This conclusion is based on the staff findings that:

1. Four of 5 samples exceeded the subjective algae guideline and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy. 2. Excess algae growth information should not be placed on the section

303(d) list because it is not a pollutant or toxicity (section 2 of the Listing Policy). Additionally, a remedial program is in place to lower ammonia concentrations in this water body which will likely address the algae problem.

3. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are met.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because it cannot be determined if the guideline used was applicable and water quality standards were exceeded. Furthermore, excess algae growth information should not be placed on the section 303(d) list because algae is not a pollutant or toxicity (section 2 of the Listing Policy).

#### Lines of Evidence:

Line of Evidence

dence Remedial Program in Place

**Beneficial Use** 

R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat

Data Used to Assess Water Quality:

An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this Reach. In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new

facilities will be operational and ammonia will be drastically reduced. Research facility operation shows that the monthly average ammonia concentration will fully comply with the chronic ammonia objective that are expected to be applicable in June 2003. It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. It is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants is much lower than downstream concentrations (up to an order of magnitude difference).

Line of Evidence Pollutant-Nuisance

**Beneficial Use** R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat

Non-Numeric Objective: Basin Plan: Waters shall not contain biostimulatory substances in

concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.

**Evaluation Guideline:** The presence of algae in the water segment. The rankings were

subjective and assigned to water bodies by one person for consistency

(LACSD, 2004a).

**Data Used to Assess** 

Water Quality:

Five observations with 4 of the observations judged to be not supporting

beneficial uses.

**Spatial Representation:** One sampling location.

Temporal Representation: Observations made between 1992 and 1995. Samples taken in different

seasons and no greater than two times within one year.

Water Segment: Coyote Creek

Pollutant: Lead

Decision: Delist

Weight of Evidence: This pollu

This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Six of 160 samples exceeded the CTR criteria for the dissolved fraction of lead and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

#### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: The California Toxics Rule dissolved lead criterion for continuous chronic concentration (CCC) in water for the protection of aquatic life is expressed as a function of the total hardness of the water body. The CCC for dissolved lead is the highest concentration to which aquatic life can be exposed for an extended period of time (four days) without deleterious effects. This criterion is linked and applicable for the protection of aquatic life Beneficial Uses.

Data Used to Assess Water Quality:

Five of 63 samples exceeded the dissolved lead CCC (LACDPW, 2004c. Los Angeles RWQCB, 2006).

rater equality.

**Spatial Representation:** The Coyote Creek Monitoring Station (S13) is located at the existing ACOE stream gauge station (Stream Gauge No. F354-R) below Spring

Street in the lower San Gabriel River watershed. The site assists in determining mass loading for the San Gabriel River watershed. At this location, the upstream tributary area is 150 square miles (extending into Orange County). The sampling site was chosen to avoid backwater effects from the San Gabriel River. Coyote Creek, at the gauging station, is a concrete lined trapezoidal channel. The Coyote Creek sampling location has been an active stream gauging station since 1963.

**Temporal Representation:** Samples were taken from 11/10/1997 to 1/7/2005.

Data Quality Assessment: Evaluation of Analytes and QA/QC Specifications for Monitoring Program

(Woodward-Clyde, 1996) Los Angeles County Department of Public

Works.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic, WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: The California Toxics Rule dissolved lead criterion for continuous concentration (CCC) in water for the protection of aquatic life is expressed as a function of the total hardness of the water body. The CCC for dissolved lead is the highest concentration to which aquatic life can be exposed for an extended period of time (four days) without deleterious effects. This criterion is linked and applicable for the protection of aquatic life Beneficial Uses.

Data Used to Assess Water Quality:

One of 97 total lead samples exceed the dissolved lead CCC. This is a conservative estimate as total lead measurements are greater than or

egual to dissolved lead measurements (LACSD, 2006).

**Spatial Representation:** Stations SG-RA, SG-RA1, and SG-R9E.

Temporal Representation: Samples taken from July 2001 to July 2005 at one to two-week sampling

intervals.

Water Segment: Coyote Creek

Pollutant: Nitrogen, Nitrite

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.1 of the Listing Policy. Under section 4.1 a single line of

evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this

pollutant. Two samples exceed the water quality objective.

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

Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of 340 samples exceeded the nitrite - nitrogen water quality objective and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

exceeded.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: RA - Rare & Endangered Species, WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: The Basin Plan Water Quality Objective for Nitrite-Nitrogen of 1 mg/L.

Data Used to Assess

Water Quality:

Out of 319 samples, none exceed the Basin Plan Objective (Green,

2006).

Spatial Representation: Three sites on Coyote Creek

**Temporal Representation:** Samples were collected June 2003 through August 2005.

Data Quality Assessment: County Sanitation Districts of Los Angeles County.

Numeric Line of Evidence Pollutant-Water

RA - Rare & Endangered Species, WA - Warm Freshwater Habitat **Beneficial Use:** 

Water Matrix:

Water Quality Objective/ **Water Quality Criterion:** 

The Basin Plan Water Quality Objective for Nitrite-Nitrogen of 1 mg/L.

**Data Used to Assess** Water Quality:

Numeric data generated from 21 samples taken from 10/30/00 to 4/30/03 at one to two-week sampling interval. Two samples exceeded the Basin

Plan WQO for Nitrite-Nitrogen (LACPWD, 2004c).

One sample site sampled during the dry and wet season beginning from **Spatial Representation:** 

10/12/00 through 4/30/03 at approximately one to two week intervals.

**Temporal Representation:** Twenty-one samples where taken during the wet and dry season from

10/12/00 to 4/30/03 at approximately one to two week intervals as part of the Los Angeles County Storm water monitoring program prepared by

the Los Angeles County Department of Public Works.

**Environmental** Conditions:

The Coyote Creek Monitoring Station (S13) is located at the existing ACOE stream gage station (Stream Gage No. F354-R) below Spring Street in the lower San Gabriel River watershed. The site assists in determining mass loading for the San Gabriel River watershed. At this location, the upstream tributary area is 150 square miles (extending into Orange County). The sampling site was chosen to avoid backwater effects from the San Gabriel River. Coyote Creek, at the gauging station, is a concrete lined trapezoidal channel. The Coyote Creek sampling location has been an active stream gauging station since 1963.

**Data Quality Assessment:** Evaluation of Analytes and QA/QC Specifications for Monitoring Program (Woodward-Clyde, 1996) Los Angeles County Department of Public

Works.

Water Segment: Coyote Creek

Pollutant: Zinc

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are

available in the administrative record to assess this pollutant.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Six of 174 samples exceeded the dissolved Zinc CTR criterion for continuous concentration and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

#### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

The California Toxics Rule dissolved zinc criterion continuous concentration (CCC) in water for the protection of aquatic life is expressed as a function of the total hardness of the water body. The CCC for dissolved zinc is the highest concentration to which aquatic life can be exposed for an extended period of time (four days) without deleterious effects. This criterion is for the protection of aquatic life Beneficial Uses.

Data Used to Assess Water Quality:

Numeric data generated from 63 samples with 5 samples exceeding the CTR dissolved zinc CCC (LACDPW, 2004C. LARWQCB, 2006).

Spatial Representation: The Coyote Creek Monitoring Station (S13) is located at the existing

ACOE stream gauge station (Stream Gauge No. F354-R) below Spring

Street in the lower San Gabriel River watershed. The site assists in determining mass loading for the San Gabriel River watershed. At this location, the upstream tributary area is 150 square miles (extending into Orange County). The sampling site was chosen to avoid backwater effects from the San Gabriel River. Coyote Creek, at the gauging station, is a concrete lined trapezoidal channel. The Coyote Creek sampling location has been an active stream gauging station since 1963.

**Temporal Representation:** Samples collected from 11/10/97 to 1/7/05.

Data Quality Assessment: Evaluation of Analytes and QA/QC Specifications for Monitoring Program

(Woodward-Clyde, 1996) Los Angeles County Department of Public

Works.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic, WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

The California Toxics Rule dissolved zinc criterion continuous concentration (CCC) in water for the protection of aquatic life is expressed as a function of the total hardness of the water body. The CCC for dissolved zinc is the highest concentration to which aquatic life can be exposed for an extended period of time (four days) without deleterious effects. This criterion is for the protection of aquatic life

Beneficial Uses.

Data Used to Assess

Water Quality:

One out of 111 total zinc samples exceed the dissolved zinc CCC. This is a conservative estimate as total zinc measurements are greater than or

equal to dissolved zinc measurements (LACSD, 2006).

**Spatial Representation:** Stations SG-RA, SG-RA1, and SG-R9E.

**Temporal Representation:** Samples taken from 2/6/1996 to 6/23/2005.

Water Segment: Dominguez Channel (lined portion above Vermont Ave)

Pollutant: Aldrin

**Decision:** Delist

**Weight of Evidence:** Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water

Quality Limited Segments category.

This conclusion is based on the staff findings that the original listing basis is faulty. The original listing was faulty since the data used to list this water body

originally was not from this water body.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the original listing has been determined to be faulty.

Lines of Evidence:

Line of Evidence Narrative Description Data

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water Quality:

The lined portion of Dominguez Channel above Vermont Avenue has a tissue listing for aldrin. This impairment was incorrectly applied to the lined portion of Dominguez Channel in the 2003 303(d) list and should be

Water Segment: Dominguez Channel (lined portion above Vermont Ave)

Pollutant: ChemA

**Decision:** Delist

**Weight of Evidence:** Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water

Quality Limited Segments category.

This conclusion is based on the staff findings that the original listing basis is faulty. The original listing was faulty since the data used to list this water body

originally was not from this water body.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the original listing has been determined to be faulty.

Lines of Evidence:

Line of Evidence Narrative Description Data

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water Quality:

The lined portion of Dominguez Channel above Vermont Avenue has a tissue listing for Chem A. This impairment was incorrectly applied to the lined portion of Dominguez Channel in the 2003 303(d) list and should be

Water Segment: Dominguez Channel (lined portion above Vermont Ave)

Pollutant: Chlordane

**Decision:** Delist

**Weight of Evidence:** Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water

Quality Limited Segments category.

This conclusion is based on the staff findings that the original listing basis is faulty. The original listing was faulty since the data used to list this water body

originally was not from this water body.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the original listing has been determined to be faulty.

Lines of Evidence:

Line of Evidence Narrative Description Data

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water Quality:

The lined portion of Dominguez Channel above Vermont Avenue has a tissue listing for chlordane. This impairment was incorrectly applied to the lined portion of Dominguez Channel in the 2003 303(d) list and should be

Water Segment: Dominguez Channel (lined portion above Vermont Ave)

Pollutant: Chromium (total)

**Decision:** Delist

**Weight of Evidence:** Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water

Quality Limited Segments category.

This conclusion is based on the staff findings that the original listing basis is faulty. The original listing was faulty since the data used to list this water body

originally was not from this water body.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the original listing has been determined to be faulty.

Lines of Evidence:

Line of Evidence Adverse Biological Responses

Beneficial Use WA - Warm Freshwater Habitat

Data Used to Assess Water Quality:

The lined portion of Dominguez Channel above Vermont Avenue has a sediment listing for chromium. This impairment was incorrectly applied to the lined portion of Dominguez Channel in the 2003 303(d) list and should be removed since no sediment data was collected in the lined

portion.

Water Segment: Dominguez Channel (lined portion above Vermont Ave)

Pollutant: DDT

**Decision:** Delist

Weight of Evidence: Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water

Quality Limited Segments category.

This conclusion is based on the staff findings that the original listing basis is faulty. The original listing was faulty since the data used to list this water body

originally was not from this water body.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the original listing has been determined to be faulty.

Lines of Evidence:

Line of Evidence Narrative Description Data

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water Quality:

The lined portion of Dominguez Channel above Vermont Avenue has tissue and sediment listings for DDT. This impairment was incorrectly applied to the lined portion of Dominguez Channel in the 2003 303(d) list and should be removed since no tissue or sediment data were collected

in the lined portion.

Water Segment: Dominguez Channel (lined portion above Vermont Ave)

**Pollutant:** Polychlorinated biphenyls (PCBs)

**Decision:** Delist

**Weight of Evidence:** Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water

Quality Limited Segments category.

This conclusion is based on the staff findings that the original listing basis is faulty. The original listing was faulty since the data used to list this water body

originally was not from this water body.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the original listing has been determined to be faulty.

Lines of Evidence:

Line of Evidence Narrative Description Data

Beneficial Use WA - Warm Freshwater Habitat

Data Used to Assess

Water Quality:

The lined portion of Dominguez Channel above Vermont Avenue has a tissue listing for PCBs. This impairment was incorrectly applied to the lined portion of Dominguez Channel in the 2003 303(d) list and should be

Water Segment: Dominguez Channel (lined portion above Vermont Ave)

**Pollutant:** Polycyclic Aromatic Hydrocarbons (PAHs)

**Decision:** Delist

**Weight of Evidence:** Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water

Quality Limited Segments category.

This conclusion is based on the staff findings that the original listing basis is faulty. The original listing was faulty since the data used to list this water body

originally was not from this water body.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the original listing has been determined to be faulty.

Lines of Evidence:

Line of Evidence Narrative Description Data

Beneficial Use WA - Warm Freshwater Habitat

Data Used to Assess

Water Quality:

The lined portion of Dominguez Channel above Vermont Avenue has a sediment listing for PAHs. This impairment was incorrectly applied to the lined portion of Dominguez Channel in the 2003 303(d) list and should be

Water Segment: Dominguez Channel Estuary (unlined portion below Vermont Ave)

Pollutant: Aldrin

**Decision:** Delist

**Weight of Evidence:** Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water

Quality Limited Segments category.

This conclusion is based on the staff findings that the original listing basis is faulty. The guidelines used to evaluate the data used to list this water body for this pollutant originally are not considered to be reliable by the Regional

Board.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the original listing has been determined to be faulty.

**Lines of Evidence:** 

Line of Evidence Narrative Description Data

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water Quality:

According to the comments submitted by the Los Angeles Regional Board, the guidelines used to evaluate the tissue data used to list this water body for this pollutant originally were not considered to be reliable. At the Board Meeting on 25 October 2006, the Board determined that this

listing should be removed as a result of this.

Water Segment: Dominguez Channel Estuary (unlined portion below Vermont Ave)

Pollutant: ChemA

**Decision:** Delist

**Weight of Evidence:** Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water

Quality Limited Segments category.

This conclusion is based on the staff findings that the original listing basis is faulty. The guidelines used to evaluate the data used to list this water body for this pollutant originally are not considered to be reliable by the Regional

Board.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the original listing has been determined to be faulty.

Lines of Evidence:

Line of Evidence Adverse Biological Responses

Beneficial Use ES - Estuarine Habitat

Data Used to Assess Water Quality:

According to the comments submitted by the Los Angeles Regional Board, the guidelines used to evaluate the tissue data used to list this water body for this pollutant originally were not considered to be reliable. At the Board Meeting on 25 October 2006, the Board determined that this

listing should be removed as a result of this.

Water Segment: Dominguez Channel Estuary (unlined portion below Vermont Ave)

Pollutant: Chromium (total)

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under sections 4.6 of the Listing

Policy. Under section 4.6 two lines of evidence are necessary to assess listing

status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, there is no significant toxicity associated with this pollutant and the number of pollutant exceedances does not exceed the frequency allowed by the Listing Policy.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies, with the requirements of section 6.1.3 of the Policy.

- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. Four of 93 samples exceeded the Effects Range Medium sediment guideline, and data shows there is not sediment toxicity associated with the pollutant exceedances. This does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

**Beneficial Use:** ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** An Effects Range-Median of 370 μg/g was used (Long et al., 1995).

**Data Used to Assess** 

Water Quality:

Four of 93 samples exceed the ERM (LARWQCB and CCC, 2004).

**Spatial Representation:** Ninety-three samples spread throughout the water body.

**Temporal Representation:** Samples were collected between 1994 and 2002.

Data Quality Assessment: Contaminated Sediments Task Force Database.

Numeric Line of Evidence Toxicity

**Beneficial Use:** ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: All waters should be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological response in, human, plant, animal, or aquatic

life.

**Evaluation Guideline:** Samples were considered toxic if (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant

difference value.

**Data Used to Assess** 

Water Quality:

One toxicity sample that showed 61 percent survival which is considered

toxic (Anderson et al., 1998).

**Spatial Representation:** One station at H. Ford Bridge (BPTCP station 47010.0).

**Temporal Representation:** The sample was collected in 1996.

**Data Quality Assessment:** Bay Protection and Toxic Cleanup Program.

Water Segment: Los Angeles Harbor - Inner Cabrillo Beach Area

Pollutant: Beach Closures

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under section 4 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. It is not known if the beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity (section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303(d) Water Quality Limited Segment list because beach closures

are not pollutants.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because applicable beach closures are not a pollutant.

Lines of Evidence:

Line of Evidence Narrative Description Data

Beneficial Use R1 - Water Contact Recreation

Data Used to Assess Water Quality:

A TMDL and implementation plan has been approved for this water segment for bacteria. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and approved

by USEPA on June 19, 2003.

Water Segment: Los Angeles River Reach 1 (Estuary to Carson Street)

Pollutant: Aluminum

**Decision:** Delist

**Weight of Evidence:** Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water

Quality Limited Segments category.

This conclusion is based on the staff findings that the original listing basis is faulty. There is no aluminum objective for this reach and during the original

listing, an inappropriate objective was applied to the data.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because it was originally listed in error.

Lines of Evidence:

Line of Evidence Narrative Description Data

Beneficial Use MU - Municipal & Domestic, WA - Warm Freshwater Habitat

Data Used to Assess Water Quality:

The listing for aluminum in this water body was originally based on data assessed using the MCL for aluminum. Since MUN is a 'potential'

beneficial use, it is not appropriate to use the MCL to evaluate aluminum data from this reach. Thus, there is no aluminum objective for this reach

and the original listing is faulty.

Water Segment: Los Angeles River Reach 1 (Estuary to Carson Street)

Pollutant: Scum/Foam-unnatural

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this water body condition. A nitrogen TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the nitrogen standard. Qualitative information on scum/foam-unnatural alone is not sufficient to support placement on the section 303(d) list (Listing Policy section 3.7). It is expected that this TMDL will address the

pollutant(s) contributing to or causing these conditions.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be removed from the Water

Quality Limited Segments category of the section 303(d) list because scum/foam-unnatural are not pollutants, but rather a condition. It is expected that this TMDL will address the pollutant(s) contributing to or causing this

condition.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Information Used to Assess Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004. This TMDL will address this

Water Segment: Los Angeles River Reach 2 (Carson to Figueroa Street)

Pollutant: Taste and odor

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

The original line of evidence supporting the listing does not identify a pollutant but rather, a condition caused by a pollutant(s) (algal growth). The Los Angeles River Nitrogen TMDL was approved by RWQCB on August, 2003 and subsequently approved by USEPA on March 2004 and this TMDL is

expected to address this water body condition.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this listing from the Water Quality Limited Segments portion of the 303(d) list because

these water segment pollutant combinations are not pollutants.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the pollutant is an ambient condition caused by

pollutant(s). A TMDL is in place and is expected to address this water body

condition.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation

Information Used to Assess Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004. This TMDL will address this

Water Segment: Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)

Pollutant: Scum/Foam-unnatural

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this water body condition. A nitrogen TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the nitrogen standard. Qualitative information on scum/foam-unnatural alone is not sufficient to support placement on the section 303(d) list (Listing Policy section 3.7). It is expected that this TMDL will address the

pollutant(s) contributing to or causing these conditions.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be removed from the Water

Quality Limited Segments category of the section 303(d) list because scum/foam-unnatural are not pollutants, but rather a condition. It is expected that this TMDL will address the pollutant(s) contributing to or causing this

condition.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation

Information Used to Assess Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004. This TMDL will address this

Water Segment: Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)

Pollutant: Taste and odor

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this water body condition. A nitrogen TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in

attainment of the nitrogen standard. Qualitative information on taste and odor alone is not sufficient to support placement on the section 303(d) list (Listing Policy section 3.7). It is expected that this TMDL will address the pollutant(s)

contributing to or causing this condition.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should not be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because taste and odor is not a pollutant, but rather a condition. It is expected that this TMDL will address the pollutant(s) contributing to or causing this

condition.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation

Information Used to Assess Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004. This TMDL will address this

Water Segment: Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)

Pollutant: Scum/Foam-unnatural

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this water body condition. A nitrogen TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the nitrogen standard. Qualitative information on scum/foam-unnatural alone is not sufficient to support placement on the section 303(d) list (Listing Policy section 3.7). It is expected that this TMDL will address the

pollutant(s) contributing to or causing these conditions.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be removed from the Water

Quality Limited Segments category of the section 303(d) list because scum/foam-unnatural are not pollutants, but rather a condition. It is expected that this TMDL will address the pollutant(s) contributing to or causing this

condition.

Lines of Evidence:

**Line of Evidence** Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation

Information Used to Assess Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004. This TMDL will address this

Water Segment: Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)

Pollutant: Taste and odor

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this water body condition. A nitrogen TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in

attainment of the nitrogen standard. Qualitative information on taste and odor alone is not sufficient to support placement on the section 303(d) list (Listing Policy section 3.7). It is expected that this TMDL will address the pollutant(s)

contributing to or causing this condition.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be removed from the Water Quality Limited Segments category of the section 303(d) list because taste and odor is a condition and not a pollutant. It is expected that the TMDL will address the pollutant(s) contributing to or causing this condition.

**Lines of Evidence:** 

Line of Evidence Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation

**Information Used to**Assess Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004. This TMDL will address this

Water Segment: Los Angeles River Reach 5 (within Sepulveda Basin)

Pollutant: Scum/Foam-unnatural

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this water body condition. A nitrogen TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the nitrogen standard. Qualitative information on scum/foam-unnatural alone is not sufficient to support placement on the section 303(d) list (Listing Policy section 3.7). It is expected that this TMDL will address the

pollutant(s) contributing to or causing these conditions.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be removed from the Water

Quality Limited Segments category of the section 303(d) list because scum/foam-unnatural are not pollutants, but rather a condition. It is expected that this TMDL will address the pollutant(s) contributing to or causing this

condition.

Lines of Evidence:

**Line of Evidence** Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation

Information Used to Assess Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004. This TMDL will address this

Water Segment: Los Angeles River Reach 5 (within Sepulveda Basin)

Pollutant: Taste and odor

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this water body condition. A nitrogen TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in

attainment of the nitrogen standard. Qualitative information on taste and odor alone is not sufficient to support placement on the section 303(d) list (Listing Policy section 3.7). It is expected that this TMDL will address the pollutant(s)

contributing to or causing this condition.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because taste and odor is a condition and not a pollutant.

**Lines of Evidence:** 

Line of Evidence Remedial Program in Place

Remedial Program in Place

R2 - Non-Contact Recreation

Beneficial Use R2 - Non-Contact Recreation

Information Used to Assess Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004. This TMDL will address this

Water Segment: Los Angeles/Long Beach Inner Harbor

Pollutant: Copper

Decision: Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.1 of the Listing Policy. Under section 4.1 two lines of evidence

are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Although significant sediment toxicity has been documented within the water body segment, copper does not appear to be the cause.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Eighteen of 627 sediment samples exceeded the sediment quality guideline and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** An Effects Range-Median of 270 μg/g was used (Long et al., 1995).

Data Used to Assess Water Quality:

Of the 627 core and grab samples available, 18 exceed the sediment

quality guideline (Los Angeles RWQCB & CCC, 2004).

**Spatial Representation:** The samples are spread through out the water segment.

**Temporal Representation:** The samples were collected between 1992 and 2001.

**Data Quality Assessment:** Bay Protection and Toxic Cleanup Program QAPP.

Quality assurance for other samples presented in the Contaminated

Sediments Task Force Database.

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

Los Angeles RWQCB Basin Plan: All waters should be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological response in, human, plant, animal, or aquatic

life.

**Evaluation Guideline:** Samples were considered toxic if (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant

difference value.

**Data Used to Assess** 

Water Quality:

Overall, 29 of 82 samples were toxic. This total was created from several different sediment studies within LA/LB Inner Harbor. Twenty-three of 67 samples were toxic (BPTCP). Six of 13 samples were toxic (Bight, 1998). None of two samples were toxic (W-EMAP) (LARWQCB & CCC, 2004).

**Spatial Representation:** Numerous (82) sites were sampled through Los Angeles/Long Beach

Inner Harbor.

Temporal Representation: Samples were collected in 1992, 1994, 1996, 1998 and 1999.

**Data Quality Assessment:** Contaminated Sediment Task Force (2005) and references therein

(BPTCP QAPP, Bight 98 QAPP, EMAP 1999 QAPP).

Water Segment: Los Angeles/Long Beach Inner Harbor

**Pollutant:** Polycyclic Aromatic Hydrocarbons (PAHs)

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under sections 4.1 and 4.6 of the Listing Policy. Under section 4.6 two lines of

evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Although sediment toxicity has been documented within the water body segment, none of the sediment samples taken exceeded the sediment quality guideline. In addition, tissue data was collected in 1994 through 1999 but there is no tissue PAH guideline available that satisfies the requirements of section 6.1.3 of the Listing Policy.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. None of the 681 sediment samples taken exceeded the sediment quality guideline and there is no tissue PAH guideline available that satisfies the requirements of section 6.1.3 of the Listing Policy to assess tissue data. These data do not exceed the allowable frequency listed in Table 4.1 of the Listing Policy. Based on section 4.6 of the Listing Policy sediment toxicity has been documented but it is unknown whether this pollutant is linked to the observed toxicity.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

# SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

CM - Commercial and Sport Fishing (CA), MA - Marine Habitat **Beneficial Use:** 

Matrix:

Water Quality Objective/ **Water Quality Criterion:** 

Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or

human health.

**Evaluation Guideline:** No tissue guideline for this pollutant is available that satisfies the

requirements of section 6.1.3 of the Listing Policy. Previous listings for

this and nearby water segments were based on background

concentrations rather than assessment guidelines.

**Data Used to Assess** 

Water Quality:

Mussel watch data available from 1994, 1997, 1998, and 1999

(Anderson, et al., 1998; SMWP, 2004).

One station (601.0). **Spatial Representation:** 

Temporal Representation: Samples were collected in 1994, 1997, 1998, and 1999.

Data Quality Assessment: State Mussel Watch Program.

Numeric Line of Evidence Pollutant-Sediment

CM - Commercial and Sport Fishing (CA), MA - Marine Habitat Beneficial Use:

Matrix: Sediment

Water Quality Objective/ **Water Quality Criterion:** 

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** A sediment guideline of 1,800 µg/g was used (Fairey et al., 2001).

**Data Used to Assess** 

Water Quality:

Of the 681 core and grab samples, none exceeded the sediment quality

guideline (CSTF, 2002).

The 681 samples are spread throughout the water body. **Spatial Representation:** 

Temporal Representation: The samples were collected between 1992 and 2001.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program QAPP.

Quality assurance for other samples presented in the Contaminated

Sediments Task Force Database.

Numeric Line of Evidence **Toxicity** 

MA - Marine Habitat **Beneficial Use:** 

Sediment Matrix:

Water Quality Objective/ **Water Quality Criterion:** 

Los Angeles RWQCB Basin Plan: All waters should be maintained free of toxic substances in concentrations that are toxic to, or that produce

detrimental physiological response in, human, plant, animal, or aquatic

life.

**Evaluation Guideline:** Samples were considered toxic if (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant

difference value.

**Data Used to Assess** 

Water Quality:

Overall, 29 of 82 samples were toxic. This total was created from several different sediment studies within LA/LB Inner Harbor. Twenty-three of 67 samples were toxic (BPTCP). Six of 13 samples were toxic (Bight, 1998). None of two samples were toxic (W-EMAP) (LARWQCB & CCC, 2004).

**Spatial Representation:** Numerous (82) sites were sampled through Los Angeles/Long Beach

Inner Harbor.

Temporal Representation: Samples were collected in 1992, 1994, 1996, 1998 and 1999.

Data Quality Assessment: Contaminated Sediment Task Force (2005) and references therein

(BPTCP QAPP, Bight 98 QAPP, EMAP 1999 QAPP).

Water Segment: Los Angeles/Long Beach Inner Harbor

Pollutant: Zinc

Decision: Delist

Weight of Evidence:

This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under section 4.1 two lines of evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Although significant sediment toxicity has been documented within the water body segment, zinc does not appear to be the cause of this toxicity.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Thirty-five of the 716 sediment samples exceeded the sediment quality guideline and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

# SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards are being met.

#### Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/
Water Quality Criterion:

Los Angeles RWQCB Basin Plan: All waters should be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological response in, human, plant, animal, or aquatic

life.

**Evaluation Guideline:** Samples were considered toxic if (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant

difference value.

Data Used to Assess Water Quality:

Overall, 29 of 82 samples were toxic. This total was created from several different sediment studies within LA/LB Inner Harbor. Twenty-three of 67 samples were toxic (BPTCP). Six of 13 samples were toxic (Bight, 1998). None of two samples were toxic (W-EMAP) (LARWQCB & CCC, 2004).

**Spatial Representation:** Numerous (82) sites were sampled through Los Angeles/Long Beach

Inner Harbor.

Temporal Representation: Samples were collected in 1992, 1994, 1996, 1998 and 1999.

**Data Quality Assessment:** Contaminated Sediment Task Force (2005) and references therein

(BPTCP QAPP, Bight 98 QAPP, EMAP 1999 QAPP).

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: CM - Commercial and Sport Fishing (CA), MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** An Effects Range-Median of 410 μg/g was used (Long et al., 1995).

**Data Used to Assess** 

Water Quality:

Of 716 samples, 35 exceeded the sediment quality guideline (LARWQCB

and CCC, 2004).

**Spatial Representation:** The samples are spread throughout the Inner Harbor. **Temporal Representation:** The samples were collected between 1992 and 2002.

**Data Quality Assessment:** Bay Protection and Toxic Cleanup Program QAPP.

Quality assurance for other samples presented in the Contaminated

Sediments Task Force Database.

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA), MA - Marine Habitat

Matrix: Tissue

Water Quality Objective/ Basin Plan: Toxic pollutants shall not be present at levels that will

Water Quality Criterion: bioaccumulate in aquatic life to levels which are harmful to aquatic life or

human health.

**Evaluation Guideline:** There is no tissue guideline available for this pollutant that satisfies the

requirements of section 6.1.3 of the Listing Policy.

**Data Used to Assess** 

Water Quality:

Ten measurements are available for mussel tissue (SMWP, 2004).

**Spatial Representation:** The measurements were taken from samples collected at three stations

in the Inner Harbor. Most of the data were collected at one station

(601.0).

Temporal Representation: The samples were collected between 1992 and 2000.

Data Quality Assessment: State Mussel Watch Program.

Water Segment: Los Angeles/Long Beach Outer Harbor (inside breakwater)

**Pollutant:** Polycyclic Aromatic Hydrocarbons (PAHs)

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.6 of the Listing Policy. Under section 4.6 a single line of

evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The site exhibits significant sediment toxicity but the pollutant is not

likely to cause or contribute to the toxic effect.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.

- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. None of the sediment samples exceeded the sediment quality guideline and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

**Evaluation Guideline:** A sediment quality guideline of 1,800 μg/g was used (Fairey et al., 2001).

The original listing was based on comparison to background

concentrations of this pollutant.

**Data Used to Assess** 

Water Quality:

Of the 75 sediment core and grab samples, none exceed the sediment

quality guideline.

**Spatial Representation:** The 75 samples are spread throughout the water body.

Temporal Representation: The samples were collected between 1992 and 2001.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program QAPP.

Quality assurance for other samples presented in the Contaminated

Sediments Task Force Database.

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: All waters should be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological response in, human, plant, animal, or aquatic

life.

**Evaluation Guideline:** Samples were considered toxic if (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant

difference value.

**Data Used to Assess** 

Water Quality:

Overall, nine of 37 samples exhibited toxicity. This total was created from several different sediment studies within the Outer Harbor. Six out of 17 samples were toxic (BPTCP). Three out of 18 samples were toxic (Bight, 1998). None out of two samples were toxic (W-EMAP) (LARWQCB &

CCC, 2004).

**Spatial Representation:** Thirty-seven sites were sampled through Outer Harbor.

Temporal Representation: Samples were collected in 1992 - 1994 and 1996 - 1999.

Data Quality Assessment: Contaminated Sediment Task Force (2005) and references therein

(BPTCP QAPP, Bight 1998 QAPP, EMAP 1999 QAPP).

Water Segment: Pico Kenter Drain

Pollutant: Ammonia

**Decision:** Delist

Weight of Evidence: Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that Pico Kenter Drain is an enclosed storm water conveyance. Enclosed storm water conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain itself and as such, should not be listed

as impaired.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because there are no beneficial uses or applicable water quality

standards for this water body.

Lines of Evidence:

**Line of Evidence** Narrative Description Data

Beneficial Use N/A

Data Used to Assess Water Quality:

Pico Kenter Drain is an enclosed stormwater conveyance. Enclosed stormwater conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain

Water Segment: Pico Kenter Drain

Pollutant: Coliform Bacteria

**Decision:** Delist

Weight of Evidence: Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that Pico Kenter Drain is an enclosed storm water conveyance. Enclosed storm water conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain itself and as such, should not be listed

as impaired.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because there are no beneficial uses or applicable water quality

standards for this water body.

Lines of Evidence:

Line of Evidence -N/A

Beneficial Use N/A

Data Used to Assess Water Quality:

Pico Kenter Drain is an enclosed stormwater conveyance. Enclosed stormwater conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain

Water Segment: Pico Kenter Drain

Pollutant: Copper

Decision: Delist

Weight of Evidence: Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that Pico Kenter Drain is an enclosed storm water conveyance. Enclosed storm water conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain itself and as such, should not be listed

as impaired.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because there are no beneficial uses or applicable water quality

standards for this water body.

Lines of Evidence:

Line of Evidence -N/A

Beneficial Use N/A

Data Used to Assess Water Quality:

Pico Kenter Drain is an enclosed stormwater conveyance. Enclosed stormwater conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain

Water Segment: Pico Kenter Drain

Pollutant: Lead

Decision: Delist

Weight of Evidence: Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that Pico Kenter Drain is an enclosed storm water conveyance. Enclosed storm water conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain itself and as such, should not be listed

as impaired.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because there are no beneficial uses or applicable water quality

standards for this water body.

Lines of Evidence:

Line of Evidence -N/A

Beneficial Use N/A

Data Used to Assess Water Quality:

Pico Kenter Drain is an enclosed stormwater conveyance. Enclosed stormwater conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain

Water Segment: Pico Kenter Drain

**Pollutant:** Polycyclic Aromatic Hydrocarbons (PAHs)

**Decision:** Delist

Weight of Evidence: Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that Pico Kenter Drain is an enclosed storm water conveyance. Enclosed storm water conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain itself and as such, should not be listed

as impaired.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because there are no beneficial uses or applicable water quality

standards for this water body.

Lines of Evidence:

Line of Evidence -N/A

Beneficial Use N/A

Data Used to Assess Water Quality:

Pico Kenter Drain is an enclosed stormwater conveyance. Enclosed stormwater conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain

Water Segment: Pico Kenter Drain

Pollutant: Toxicity

**Decision:** Delist

Weight of Evidence: Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that Pico Kenter Drain is an enclosed storm water conveyance. Enclosed storm water conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain itself and as such, should not be listed

as impaired.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because there are no beneficial uses or applicable water quality

standards for this water body.

Lines of Evidence:

Line of Evidence -N/A

Beneficial Use N/A

Data Used to Assess Water Quality:

Pico Kenter Drain is an enclosed stormwater conveyance. Enclosed stormwater conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain

Water Segment: Pico Kenter Drain

Pollutant: Trash

**Decision:** Delist

Weight of Evidence: Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that Pico Kenter Drain is an enclosed storm water conveyance. Enclosed storm water conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain itself and as such, should not be listed

as impaired.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because there are no beneficial uses or applicable water quality

standards for this water body.

Lines of Evidence:

Line of Evidence -N/A

Beneficial Use N/A

Data Used to Assess Water Quality:

Pico Kenter Drain is an enclosed stormwater conveyance. Enclosed stormwater conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain

Water Segment: Pico Kenter Drain

**Pollutant:** Viruses (enteric)

**Decision:** Delist

Weight of Evidence: Based on the readily available data and information, the weight of evidence

indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that Pico Kenter Drain is an enclosed storm water conveyance. Enclosed storm water conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain itself and as such, should not be listed

as impaired.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because there are no beneficial uses or applicable water quality

standards for this water body.

Lines of Evidence:

Line of Evidence -N/A

Beneficial Use N/A

Data Used to Assess Water Quality:

Pico Kenter Drain is an enclosed stormwater conveyance. Enclosed stormwater conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain

Water Segment: San Gabriel River Reach 2 (Firestone to Whittier Narrows Dam

Pollutant: Copper

Decision: Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.1 of the Listing Policy. Under section 4.1 a single line of

evidence is necessary to assess delisting status.

One line of evidence is available in the administrative record to assess this

pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 51 samples exceeded the CTR criteria and this is below the allowable frequency listed in Table 4.1 of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

exceeded.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WE -

Wetland Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: CTR Dissolved Copper Criterion for continuous concentration (CCC) in water for the protection of aquatic life is expressed as a function of the total hardness of the water body. The aquatic life criteria will vary depending of total hardness reported at the sampling site. The CCC for dissolved copper is the highest concentration to which aquatic life can be exposed for an extended period of time (four days) without deleterious effects. This criterion is linked and applicable for the protection of aquatic life Beneficial Uses.

**Data Used to Assess** 

Water Quality:

Numeric data generated from 51 samples taken from 10/14/98 to 1/1/04, none of which exceed the hardness based CCC (LACDPW, 2004c).

**Spatial Representation:** One (1) sampling station sampled from 10/14/98 to 1/1/04.

Temporal Representation: Samples taken during the wet and dry season from 10/14/98 to 1/1/04 at

approximately one to two week intervals.

Data Quality Assessment: Evaluation of Analytes and QA/QC Specifications for Monitoring Program

(Woodward-Clyde, 1996) Los Angeles County Department of Public

Works.

Water Segment: San Gabriel River Reach 2 (Firestone to Whittier Narrows Dam

Pollutant: Zinc

Decision: Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.1 of the Listing Policy. Under section 4.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this

pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of

the Policy.

3. Three of 58 samples exceeded the CTR Criteria and this does not exceed

the allowable frequency listed in Table 4.1 of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

exceeded.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

CTR Dissolved Zinc Criterion for continuous concentration (CCC) in water for the protection of aquatic life is expressed as a function of the total hardness of the water body. The aquatic life criteria will vary depending on total hardness reported at the sampling site. The CCC for dissolved zinc is the highest concentration to which aquatic life can be exposed for an extended period of time (four days) without deleterious effects. This criterion is linked and applicable for the protection of aquatic

life Beneficial Uses.

**Data Used to Assess** 

Water Quality:

Numeric data generated from 58 samples taken from 11/10/97 to 1/7/05 at one to two-week sampling interval. Three samples exceeded the dissolved zinc Continuous Criterion Concentration (CCC) (LARWQCB,

2006).

**Spatial Representation:** Site S14.

**Temporal Representation:** Samples collected between 11/10/97 and 1/7/05.

Data Quality Assessment: San Gabriel River Metals TMDL monitoring.

San Gabriel River Reach 3 (Whittier Narrows to Ramona) **Water Segment:** 

Toxicity Pollutant: Delist Decision:

This pollutant is being considered for delisting under sections 4.6 of the Listing Weight of Evidence:

Policy. Under section 4.6 a single line of evidence is necessary to assess

listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on section 4.6, the site does not have significant water

toxicity.

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

Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The sediment quality quideline used complies, with the requirements of section 6.1.3 of the Policy.

2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

4. Two of the 38 samples exceeded the NOEC and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

5. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are met.

**SWRCB Staff** Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not

exceeded.

#### Lines of Evidence:

Numeric Line of Evidence **Toxicity** 

**Beneficial Use:** WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ **Water Quality Criterion:** 

Narrative Toxicity Basin Plan WQO is applicable to the protection of

aquatic life BUs.

**Evaluation Guideline:** No observed effect concentration (NOEC) is the highest tested

concentration of toxicant to which organisms are exposed in a full lifecycle or partial life-cycle (shot-term) test that causes no observable adverse effect on the test organisms. The guideline is used and

recommended to determine the highest concentration of toxicant at which the values of the observed responses are not statistically significantly

different from the control.

**Data Used to Assess** Water Quality:

Two of 38 samples showed evidence of statistically significant toxicity. Ceriodaphnia dubia, Pimephales promelas, and Pseudokirchneriella

subcapitata were used as test species in these samples.

**Spatial Representation:** 

The NPDES water quality monitoring samples were collected from receiving water stations WN-RA and R11. The TMDL toxicity study conducted by U.S. EPA and the Districts collected samples from the San Gabriel River at Peck Road.

**Temporal Representation:** The NPDES water quality monitoring was conducted from June 2003 through May 2004. The TMDL toxicity study conducted by U.S. EPA and the Districts was conducted from August 2003 through October 2003.

Water Segment: Santa Clara River Reach 5 (Blue Cut gaging station to West Pier Hwy 99

Bridge) (was named Santa Clara River Reach 7 on 2002 303(d) lists)

**Pollutant:** Nitrate and Nitrite

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.1 of the Listing Policy. Under section 4.1 a single line of

evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess

this pollutant.

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

Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of 37 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and

information are available indicating that standards are met.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB Staff concludes that the water body should be removed from the Water Quality Limited Segments category of the section 303(d) list because

standards are being met.

### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

Los Angeles RWQCB Basin Plan: Water shall not exceed 5 mg/L as nitrate-nitrogen plus nitrite-nitrogen as applicable for the protection of

existing water quality conditions [Table 3-8].

Data Used to Assess

Water Quality:

Two of 29 samples exceed the water quality objective (LACSD, 2004b).

**Spatial Representation:** Samples were taken at four samples stations RC, RD, RE, and RB01.

**Temporal Representation:** Samples were taken from 9/10/03 to 5/12/04 at monthly intervals.

**Environmental** Conditions:

The Districts' Valencia Water Reclamation Plant, which is located in Reach 7, was partially converted to NDN mode starting May 12, 2003,

and was fully converted to NDN mode on June 18, 2003. The

implementation of NDN at these WRPs represents a significant change in water quality nitrogen conditions in Reach 5 of the Santa Clara River.

Data Quality Assessment: Quality Assurance Document Of The County Sanitation Districts Of Los

Angeles County. July 2003.

Numeric Line of Evidence

Pollutant-Water

**Beneficial Use:** 

R1 - Water Contact Recreation, WI - Wildlife Habitat

Matrix:

Water Quality Objective/ **Water Quality Criterion:** 

Los Angeles RQWCB Basin Plan: Water shall not exceed 5 mg/L as nitrate-nitrogen plus nitrite-nitrogen as applicable for the protection of

existing water quality conditions [Table 3-8].

**Data Used to Assess** 

Water Quality:

None of 8 samples exceed the water quality objective. Data obtained

from the United Water Conservation District (LACSD, 2004b).

**Spatial Representation:** 

Blue Cut sampling site near Los Angeles/ Ventura county line.

Temporal Representation: Samples were taken at monthly intervals from 9/10/03 to 4/27/04.

**Data Quality Assessment:** Fruit Growers Laboratory Quality Manual.

Line of Evidence

Remedial Program in Place

**Beneficial Use** 

R1 - Water Contact Recreation, WI - Wildlife Habitat

Information Used to **Assess Water Quality:**  A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Clara River Nitrogen TMDL was approved by RWQCB on August 7, 2003 and subsequently

approved by USEPA on March 18, 2004.

Water Segment: Santa Monica Bay Offshore/Nearshore

Pollutant: Chlordane

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under sections 4.6 of the Listing

Policy. Under section 4.6 a single line of evidence is necessary to assess

listing status.

Multiple lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site does have significant sediment toxicity but chlordane is not likely to cause or contribute to any toxic effect.

The benthic community is impacted.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.

- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. Four of the 284 sediment samples exceeded the sediment guideline, none of the 425 tissue samples exceeded the guideline, and five of 23 samples exhibit toxicity. Although toxicity is documented, the pollutant does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because it cannot be determined if applicable water quality

standards are not being attained.

#### Lines of Evidence:

Numeric Line of Evidence Population/Community Degradation

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

LARWQCB Basin Plan 1994: No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. There shall be no increases in pesticide concentrations

found in bottom sediments or aquatic life.

**Evaluation Guideline:** Benthic Response Index (BRI) is a guidance developed by SCCWRP

based on changes in biodiversity along a pollutant gradient that is defined by the index values. The index points define specific percentages

where the biodiversity of the reference pool is lost. The BRI defines the abundance weighted pollution tolerance of the species present at a site and ranges from Response level RL 1 through 4. RL1 indicates marginal deviations from reference conditions (REF), while RL 2 through 4 are

considered evidence of disturbed benthic conditions.

**Data Used to Assess** 

Water Quality:

Data generated from 23 samples within different stations in Santa Monica Bay using the BRI to assess benthic conditions indicate that 5 samples

marginally deviate from reference conditions (LACSD, 2004b).

**Spatial Representation:** Twenty-three sample sites within Santa Monica Bay at different dates in

1998.

Temporal Representation: Twenty-three samples taken during 1998 at 23 different sampling

stations.

Data Quality Assessment: Southern California Bight 1998 Regional Marine Monitoring Survey

(Bight, 1998) Quality Assurance Manual (CSCCWRP Bight 1998)

Steering Committee. July, 1998)

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: MA - Marine Habitat

Beneficial Use: MA - Marine H
Matrix: Sediment

Water Quality Objective/

Water Quality Objective/ Water Quality Criterion: LARWQCB Basin Plan 1994: No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. There shall be no increases in pesticide concentrations

found in bottom sediments or aquatic life.

**Evaluation Guideline:** Sediment Quality Guidelines (SQGs) are used to determine the toxic

effects of a sample, concurrently collected measurements of chemical concentrations can be used to associate toxic effects with toxicity or other biological effects. The predictability of toxicity, using the SQGs values reported (Long et al., 1998) is reasonably good and is most useful if accompanied by data from biological analyses, toxicological analyses, and other interpretative tools. The SQG for total chlordane is 6  $\mu g/kg$ .

Data Used to Assess Water Quality:

Four of 284 sediment samples exceeded guidelines. Collection

procedures were consistent with approaches described by NOAA CPRD Standardized Sums and SCCWRP Chemistry Datasets Imputation

Summation Procedures (USEPA, 2006).

**Spatial Representation:** Data was collected at two sites: Palos Verdes Shelf and Hyperion Waste

Water Treatment Plant.

Temporal Representation: Data was collected between 1998 and 2004.

Data Quality Assessment: Quality Assurance Document Of The County Sanitation Districts Of Los

Angeles County, July 2003.

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: MA - Marine Habitat

Matrix: Tissue

Water Quality Objective/ **Water Quality Criterion:** 

LARWQCB Basin Plan 1994: No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. There shall be no increases in pesticide concentrations

found in bottom sediments or aquatic life.

**Evaluation Guideline:** 

OEHHA screening value for chlordane: 30 µg/kg.

**Data Used to Assess** 

Water Quality:

None of 425 tissue samples exceeded guidelines. Collection procedures

were consistent with approaches described by NOAA CPRD Standardized Sums and SCCWRP Chemistry Datasets Imputation

Summation Procedures (USEPA, 2006).

Samples were collected at four sites: Santa Monica Pier. Venice Pier. **Spatial Representation:** 

Party Boat to Malibu Kelp Beds, and Hyperion Waste Water Treatment

Plant.

Temporal Representation: Samples were collected between 1999 and 2004.

Data Quality Assessment: Quality Assurance Document Of The County Sanitation Districts Of Los

Angeles County July 2003

Numeric Line of Evidence

Pollutant-Sediment MA - Marine Habitat

**Beneficial Use:** 

Matrix:

Sediment

Water Quality Objective/

**Water Quality Criterion:** 

LARWQCB Basin Plan 1994: No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. There shall be no increases in pesticide concentrations

found in bottom sediments or aquatic life.

**Evaluation Guideline:** 

Sediment Quality Guidelines (SQGs) are used to determine the toxic effects of a sample, concurrently collected measurements of chemical concentrations can be used to associate toxic effects with toxicity or other biological effects. The predictability of toxicity, using the SQGs values reported (Long et al., 1998) is reasonably good and is most useful if accompanied by data from biological analyses, toxicological analyses. and other interpretative tools. The SQG for total chlordane is 6 µg/kg.

**Data Used to Assess** 

Water Quality:

Data generated from 23 samples different stations in Santa Monica Bay using SQGs to assess toxic effects due to total chlordane. No sample

exceeded the total chlordane SQG (LACSD, 2004b).

**Spatial Representation:** 

Twenty-three sample sites were sampled within Santa Monica Bay at

different dates during 1998.

Temporal Representation: Twenty-three samples were taken from twenty-three different sampling

stations within the Santa Monica Bay during 1998.

Data Quality Assessment: Quality Assurance Document of the County Sanitation Districts Of Los

Angeles County, July 2003.

Water Segment: Santa Monica Bay Offshore/Nearshore

**Pollutant:** Polycyclic Aromatic Hydrocarbons (PAHs)

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under sections 4.6 of the Listing

Policy. Under section 4.6 a single line of evidence is necessary to assess

listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site does have significant sediment toxicity but PAHs are not likely to cause or contribute to any toxic effect. The

benthic community is impacted.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies, with the requirements of section 6.1.3 of the Policy.

- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. None of the 292 sediment samples exceeded the PAHs sediment guideline, but five of 23 sediment samples marginally deviate from the reference conditions using the Benthic Response Index (BRI). Toxicity is documented, however the pollutant does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards are attained.

# Lines of Evidence:

Numeric Line of Evidence Population/Community Degradation

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: LARWQCB Basin Plan 1994: No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. There shall be no increases in pesticide concentrations found in bottom sediments or aquatic life.

**Evaluation Guideline:** Benthic Response Index (BRI) is a guidance developed by SCCWRP

based on changes in biodiversity along a pollutant gradient that is defined by the index values. The index points define specific percentages

where the biodiversity of the reference pool is lost. The BRI defines the abundance weighted pollution tolerance of the species present at a site and ranges from Response level RL 1 through 4. RL1 indicates marginal deviations from reference conditions (REF), while RL 2 through 4 are

considered evidence of disturbed benthic conditions.

**Data Used to Assess** 

Water Quality:

Data generated from 23 samples within different stations in Santa Monica Bay using the BRI to assess benthic conditions indicate that 5 samples

marginally deviate from reference conditions (LACSD, 2004b).

**Spatial Representation:** Twenty-three sample sites within Santa Monica Bay at different dates in

1998.

Temporal Representation: Twenty-three samples taken during 1998 at 23 different sampling

stations.

Data Quality Assessment: Southern California Bight 1998 Regional Marine Monitoring Survey

(Bight, 1998) Quality Assurance Manual (CSCCWRP Bight 1998

Steering Committee. July, 1998)

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: LARWQCB Basin Plan 1994: All waters shall be maintained free of toxic

substances in concentrations that are toxic to, or that produce

detrimental physiological responses in, human, plant, animal, or aquatic

life.

**Evaluation Guideline:** Sediment Quality Guideline for total PAHs is 1800 μg/g (Fairey et al.,

2001).

**Data Used to Assess** 

Water Quality:

None of the 269 samples exceeded the sediment quality guideline

(LARWQCB & CCC, 2004).

**Spatial Representation:** Samples taken in Santa Monica Bay offshore/nearshore.

**Temporal Representation:** Samples taken between 1980 and 2001. Most of these samples were

taken after the year 1997.

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/
Water Quality Criterion:

LARWQCB Basin Plan 1994: All waters shall be maintained free of toxic

substances in concentrations that are toxic to, or that produce

detrimental physiological responses in, human, plant, animal, or aquatic

life.

**Evaluation Guideline:** Sediment Quality Guideline for total PAHs is 1800 μg/g (Fairey et al.,

2001).

**Data Used to Assess** 

Water Quality:

Data generated from 23 samples at different stations in Santa Monica Bay using SQGs to assess toxic effects due total PAHs. No sample exceeded the total PAHs SQG for the protection of marine aquatic life

(LACSD, 2004b).

**Spatial Representation:** Twenty-three sample sites were sampled within Santa Monica Bay at

different dates during 1998.

Temporal Representation: Twenty-three samples where taken from 5/7/02 through 5/4/04 at

quarterly intervals from three sampling stations (R1, R2, and R5).

Data Quality Assessment: Quality Assurance Document of the County Sanitation Districts Of Los

Angeles County, July 2003.

# Los Angeles Region (4)

# Original Fact Sheets

Fact Sheets Not Changed from September 2005 Version

# Los Angeles Region (4)



Recommendations to place waters and pollutants on the section 303(d) List

Water Segment: Aliso Canyon Wash

Pollutant: Copper

Decision: List

Weight of Evidence:

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

Two lines of evidence are available in the administrative record to assess this pollutant. A sufficient number of samples exceed the water quality objective.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Two of five samples exceeded the CTR criterion continuous concentration for dissolved copper for protection of aquatic life and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable CTR criteria continuous concentration is exceeded and a pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: CTR criteria linked and applicable to Warm Fresh Water Habitat BUs.

Data Used to Assess Water

Quality:

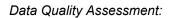
Five samples, 2 exceeded the CTR criteria (LACDPW, 2003a).

Spatial Representation: One sampling site.

Temporal Representation: Five monthly samples taken during the wet season (11/08/2002-

3/15/2003) and one sample taken during the dry season (04/30/2003).

Environmental Conditions: Data Age 1-2 years.



Evaluation of Analytes and QA/QC Specifications for Monitoring Program (Woodward-Clyde, 1996) Los Angeles County Department of Public Works.

Water Segment: Ballona Creek

Pollutant: Cyanide

**Decision:** List

Weight of Evidence:

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

One line of evidence is available in the administrative record to assess this pollutant. There were sufficient number of exceedances of the CTR Cyanide criteria continuous concentration to list.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Three of 18 samples exceeded the CTR Cyanide criteria continuous concentration and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: CTR Criteria Continuous Concentration of 0.0052 mg/L is the highest concentration of Cyanide to which aquatic life can be exposed for an extended period of time (four days) without deleterious effects applicable

to protect aquatic life BUs.

Data Used to Assess Water Quality:

Numeric data generated from 18 samples out of which three samples exceeded the CTR Criteria Continuous Concentration of 0.0052 mg/L for

protection of aquatic life (LACDPW, 2004c).

Spatial Representation: One sample site sampled during the dry and wet season beginning on

10/12/00 through 04/30/2003 at approximately one to two-week sampling

interval.

Temporal Representation: Eighteen samples where taken during the wet and dry season from

10/12/00 to 4/30/03 at approximately one to two-week sampling interval as part of the Los Angeles County Storm water Monitoring report prepared by the Los Angeles County Department of Public Works.

Environmental Conditions: Data Age is 1 to 4 years old. The Ballona Creek monitoring station is

located at the existing stream gage station (Stream Gage No. F38C-R) between Sawtelle Boulevard and Sepulveda Boulevard in the City of Los Angeles. At this location, which was chosen to avoid tidal influences, the upstream tributary watershed of Ballona Creek is 88.8 square miles. The entire Ballona Creek Watershed is 127.1 square miles. At the gauging

station, Ballona Creek is a concrete lined trapezoidal channel.

Data Quality Assessment: Evaluation of Analytes and QA/QC Specifications for Monitoring Program

(Woodward-Clyde, 1996) Los Angeles County Department of Public

Works.

Water Segment: Calleguas Creek Reach 3 (Potrero Road upstream to confluence with Conejo

Creek on 1998 303d list)

Pollutant: Chlordane

**Decision:** List

**Weight of Evidence:** This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of the 7 samples exceeded the NAS Guideline (whole fish) and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at Water Quality Criterion: Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to

aguatic life or human health.

- 1----

Evaluation Guideline: 100 ng/g NAS Guideline (whole fish) (NAS, 1972).

Data Used to Assess Water Two out of

Quality:

Two out of 7 samples exceeded the NAS Guideline. A total of 7 whole fish composite samples of fathead minnows and arroy chub were

collected. Fathead minnows were collected in 1992-97. Arroyo chub were collected in 2000-01. The guideline was exceeded in 1993 and 1997

samples of fathead minnows (TSMP, 2002).

Spatial Representation: One station located downstream of Lewis Road crossing.

Temporal Representation: Samples were collected annually 1992 - 94, 1997, and 2000-01. Data Quality Assessment:

Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish and Game.

Water Segment: Calleguas Creek Reach 3 (Potrero Road upstream to confluence with Conejo

Creek on 1998 303d list)

Pollutant: DDT

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three of the 3 samples exceeded the OEHHA Screening Value and 6 out of 7 samples exceeded NAS Guidelines (whole fish). This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to

aquatic life or human health.

Evaluation Guideline: 100 ng/g OEHHA Screening Value (Brodberg & Pollock, 1999).

1000 ng/g NAS Guideline (Whole Fish) (NAS, 1972).

Data Used to Assess Water

Quality:

Three out of 3 samples exceeded OEHHA Screening Value. Six out of 7 samples exceeded NAS Guidelines. A total of 3 filet composite samples were collected: one fathead minnow (1994), one brown bullhead (1999).

and one black bullhead (2001). All three samples exceeded the

guidelines. A total of 7 whole fish composite samples were collected: five

fathead minnow (1992-94 & 1997) and two arroyo chub (2000-01). All but

one arroyo chub sample exceeded the guidelines (TSMP, 2002).

Spatial Representation: One station located downstream of Lewis Road crossing.

Temporal Representation: Samples were collected annually 1992-94, 1997, 1999 -2001.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

and Game.

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

by USEPA.

Water Segment: Calleguas Creek Reach 3 (Potrero Road upstream to confluence with Conejo

Creek on 1998 303d list)

Pollutant: Dieldrin

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of the 3 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

SWRCB Staff Recommendation:

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

pollutant contributes to or causes the problem.

# **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at Water Quality Criterion: Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to

aguatic life or human health.

Evaluation Guideline: 2 ng/g - OEHHA Screening Value (Brodberg & Pollock, 1999).

Data Used to Assess Water Two out of 3 samples exceeded. A total

Quality:

Two out of 3 samples exceeded. A total of 3 filet composite samples were collected: one fathead minnow (1994), one brown bullhead (1999), and one black bullhead sample (2001). Fathead minnow and brown

bullhead exceeded the guideline (TSMP, 2002).

Spatial Representation: One station located downstream of Lewis Road crossing.

Temporal Representation: Samples were collected 1994, 1999, and 2001.

Data Quality Assessment: Toxic Substances Monitoring Program 1994-95 Data Report.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

and Game.

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

by USEPA.

Calleguas Creek Reach 3 (Potrero Road upstream to confluence with Conejo **Water Segment:** 

Creek on 1998 303d list)

Pollutant: Toxaphene

List **Decision:** 

This pollutant is being considered for placement on the section 303(d) list Weight of Evidence:

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of

the Policy.

3. Two of the 2 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

**SWRCB Staff** Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix:

Water Quality Objective/ Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at Water Quality Criterion:

levels that will bioaccumulate in aquatic life to levels which are harmful to

aquatic life or human health.

Evaluation Guideline: 30 ng/g OEHHA Screening Value (Brodberg & Pollock, 1999).

100 ng/g NAS Guideline (Whole Fish) (NAS, 1972).

Data Used to Assess Water

Quality:

Two out of 2 samples exceeded OEHHA Screening Value. Eight out of 8

samples exceeded NAS Guidelines (TSMP, 2002).

Spatial Representation: One station located downstream of Lewis Road crossing.

Temporal Representation: Samples were collected annually 1992-94, 1997, 1999 -2001.

Toxic Substances Monitoring Program 1992-93 and 1994-95 Data Data Quality Assessment:

Reports.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

and Game.

Line of Evidence Remedial Program in Place

Beneficial Use CM - Commercial and Sport Fishing (CA)

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Calleguas Creek Historic Pesticides TMDL was approved by the RWQCB in 2005 and subsequently approved

by USEPA.

Water Segment: Coyote Creek

Pollutant: Diazinon

Decision: List

Weight of Evidence:

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

One line of evidence is available in the administrative record to assess this pollutant. A number of samples exceed the Diazinon DFG fresh water hazard assessment criteria.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Two of 22 samples exceeded the Diazinon DFG fresh water hazard assessment criteria and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan narrative WQO for Pesticides.

Evaluation Guideline: Numerical Diazinon guideline used to interpret Basin Plan narrative

pesticide WQO. The numeric guidelines are 0.10  $\mu$ g/L 4-day average and 0.16  $\mu$ g/L 1-hour average generated by DFG as a fresh water hazard assessment criteria for the protection of aquatic life (Siepman &

Finlayson, 2000: Finlayson, 2004).

Data Used to Assess Water

Quality:

Numeric data generated from 22 samples taken from 10/12/00 to 4/30/03 at one to two-week sampling interval. Two samples out 22 exceeded the acute DFG fresh water hazard assessment criteria for the protection of

aquatic life (LACDPW, 2004c).

Spatial Representation: One sample site sampled during the dry and wet season beginning from

10/12/00 through 4/30/03 at approximately one to two week intervals.

Temporal Representation: Twenty-one samples were taken during the wet season and one sample

was taken during the dry season from 10/12/00 to 4/30/03 at approximately one to two week intervals as part of the Los Angeles County Storm water monitoring program prepared by the Los Angeles

County Department of Public Works.

Environmental Conditions: The Coyote Creek Monitoring Station (S13) is located at the existing

ACOE stream gage station (Stream Gage No. F354-R) below Spring Street in the lower San Gabriel River watershed. The site assists in determining mass loading for the San Gabriel River watershed. At this location, the upstream tributary area is 150 square miles (extending into Orange County). The sampling site was chosen to avoid backwater effects from the San Gabriel River. Coyote Creek, at the gauging station, is a concrete lined trapezoidal channel. The Coyote Creek sampling location has been an active stream gauging station since 1963.

Data Quality Assessment: Evaluation of Analytes and QA/QC Specifications for Monitoring Program

(Woodward-Clyde, 1996) Los Angeles County Department of Public

Works.

Water Segment: Coyote Creek

Pollutant: pH

Decision: List

Weight of Evidence:

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

Two lines of evidence are available in the administrative record to assess this pollutant. A large number of samples exceed the water quality objective.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. One of 15 samples taken during 10/00 and 1/02 was below the 6.5 pH WQO. However, 97 of 229 samples taken from 6/03 and 11/04 exceeded the pH water quality objective at three sampling stations and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan WQO for inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waster discharges to protect

aquatic life BUs.

Data Used to Assess Water Quality:

Numeric data generated from 15 samples taken from 10/12/00 to 1/28/02 at one to two-week sampling interval. One sample was below the 6.5 pH basin plan WQO for the protection of aquatic life beneficial uses

(LACDPW. 2003a).

One sample site sampled during the dry and wet season beginning from Spatial Representation:

10/12/00 through 1/28/02 at approximately one to two week intervals.

Temporal Representation: Fifteen samples where taken during the wet and dry season from

> 10/12/00 to 1/28/02 at approximately one to two week intervals as part of the Los Angeles County Storm water monitoring program prepared by

the Los Angeles County Department of Public Works.

Environmental Conditions: The Coyote Creek Monitoring Station (S13) is located at the existing

ACOE stream gage station (Stream Gage No. F354-R) below Spring Street in the lower San Gabriel River watershed. The site assists in determining mass loading for the San Gabriel River watershed. At this location, the upstream tributary area is 150 square miles (extending into Orange County). The sampling site was chosen to avoid backwater effects from the San Gabriel River. Coyote Creek, at the gauging station, is a concrete lined trapezoidal channel. The Covote Creek sampling location has been an active stream gauging station since 1963.

Evaluation of Analytes and QA/QC Specifications for Monitoring Program Data Quality Assessment:

(Woodward-Clyde, 1996) Los Angeles County Department of Public

Works.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/

Basin Plan: The pH of inland surface waters shall not be depressed Water Quality Criterion: below 6.5 or raised above 8.5 as a result of waste discharges. Ambient

pH levels shall not be changed more than 0.5 units from natural

conditions as a result of waste discharge.

Data Used to Assess Water

Quality:

Ninety-seven samples out of 229 total samples exceed the pH objective.

Spatial Representation: Three stations.

Temporal Representation: Samples were collected weekly between June 2003 and November

2004.

NPDES quality assurance. Data Quality Assessment:

Water Segment: Dominguez Channel Estuary (unlined portion below Vermont Ave)

Pollutant: Benzo(a)pyrene (PAHs)

**Decision:** List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under section 3.9 of the Listing Policy. Under section 3.9 two lines of evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. A sufficient number of samples exceeded the sediment quality guideline. Although sediment toxicity has been observed it is not enough to establish a sufficiently strong association with the sediment pollutant concentration. However, significant benthic degradation has been recorded and this may be linked with this pollutant concentration in this water body segment.

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

This conclusion is based on the staff findings that:

- 1. Data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Seven of 41 samples exceeded the sediment quality guideline. These data exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Based on section 3.9 of the Listing Policy significant benthic impact has been documented and the pollutant in sediment may be linked to the observed impacts.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: All waters should be maintained free of toxic substances in concentrations that are toxic to, or that produce

detrimental physiological response in, human, plant, animal, or aquatic

life.

Evaluation Guideline: Samples were considered toxic if (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant

difference value.

Data Used to Assess Water

Quality:

One toxicity sample that showed 61 percent survival which is considered

toxic (Anderson et al., 1998).

Spatial Representation: One station at H. Ford Bridge (BPTCP station 47010.0).

Temporal Representation: The sample was collected in 1996.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program.

Numeric Line of Evidence Population/Community Degradation

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

Evaluation Guideline: Evaluation of the benthic data were completed using the approaches

developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the

benthic community (Anderson et al., 1998).

Data Used to Assess Water

Quality:

One benthic community sample with a benthic index of 0.21 (Anderson et

al., 1998).

Spatial Representation: One station at H. Ford Bridge (BPTCP station 47010.0).

Temporal Representation: The sample was collected in 1996.

Environmental Conditions: Adjacent waters (Consolidated Slip) also has degraded benthic

communities.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program (Stephenson et al., 1994).

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Basin Plan: Surface waters shall not contain concentrations of chemical water Quality Criterion: Constituents in amounts that adversely affect any designated beneficial

use.

Evaluation Guideline: A sediment quality guideline of 763.22 ng/g was used (MacDonald et al.,

1996).

Data Used to Assess Water

Quality:

Of 41 sediment core samples, 7 exceeded the sediment quality guideline

(LARWQCB and CCC, 2004).

Spatial Representation: Forty-one samples are spread throughout the water body.

Temporal Representation: The samples were collected in 2002.

Quality assurance is described in the Contaminated Sediments Task Force Database. Data Quality Assessment:

Water Segment: Dominguez Channel Estuary (unlined portion below Vermont Ave)

Pollutant: Chrysene (C1-C4)

**Decision:** List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under section 3.9 of the Listing Policy. Under section 3.9 two lines of evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. A sufficient number of samples exceeded the sediment quality guideline. Although sediment toxicity has been observed it is not enough to establish a sufficiently strong association with the sediment pollutant concentration. However, significant benthic degradation has been recorded and this may be linked with this pollutant concentration in this water body segment.

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

This conclusion is based on the staff findings that:

- 1. Data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Eight of 41 samples exceeded the sediment quality guideline. These data exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Based on section 3.9 of the Listing Policy significant benthic impact has been documented and the pollutant in sediment may be linked to the observed impacts.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: All waters should be maintained free of toxic substances in concentrations that are toxic to, or that produce

detrimental physiological response in, human, plant, animal, or aquatic

life.

Evaluation Guideline: Samples were considered toxic if (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant

difference value.

Data Used to Assess Water

Quality:

One toxicity sample that showed 61 percent survival which is considered

toxic (Anderson et al., 1998).

Spatial Representation: One station at H. Ford Bridge (BPTCP station 47010.0).

Temporal Representation: The sample was collected in 1996.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program.

Numeric Line of Evidence Population/Community Degradation

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

Evaluation Guideline: Evaluation of the benthic data were completed using the approaches

developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the

benthic community (Anderson et al., 1998).

Data Used to Assess Water

Quality:

One benthic community sample with a benthic index of 0.21 (Anderson et

al., 1998).

Spatial Representation: One station at H. Ford Bridge (BPTCP station 47010.0).

Temporal Representation: The sample was collected in 1996.

Environmental Conditions: Adjacent waters (Consolidated Slip) also has degraded benthic

communities.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program (Stephenson et al., 1994).

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Basin Plan: Surface waters shall not contain concentrations of chemical water Quality Criterion: Constituents in amounts that adversely affect any designated beneficial

use.

Evaluation Guideline: A sediment quality guideline of 845.98 ng/g was used (MacDonald et al.,

1996).

Data Used to Assess Water

Quality:

Of 41 sediment core samples, 8 exceeded the sediment quality guideline

(LARWQCB and CCC, 2004).

Spatial Representation: Forty-one samples are spread throughout the water body.

Temporal Representation: The samples were collected in 2002.

Quality assurance is described in the Contaminated Sediments Task Force Database. Data Quality Assessment:

Water Segment: Dominguez Channel Estuary (unlined portion below Vermont Ave)

Pollutant: Phenanthrene

Decision: List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under section 3.9 of the Listing Policy. Under section 3.9 two lines of evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. A sufficient number of samples exceeded the sediment quality guideline. Although sediment toxicity has been observed it is not enough to establish a sufficiently strong association with the sediment pollutant concentration. However, significant benthic degradation has been recorded and this may be linked with this pollutant concentration in this water body segment.

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

This conclusion is based on the staff findings that:

- 1. Data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Nine of 41 samples exceeded the sediment quality guideline. These data exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Based on section 3.9 of the Listing Policy significant benthic impact has been documented and the pollutant in sediment may be linked to the observed impacts.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: All waters should be maintained free of toxic substances in concentrations that are toxic to, or that produce

detrimental physiological response in, human, plant, animal, or aquatic

life.

Evaluation Guideline: Samples were considered toxic if (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant

difference value.

Data Used to Assess Water

Quality:

One toxicity sample that showed 61 percent survival which is considered

toxic (Anderson et al., 1998).

Spatial Representation: One station at H. Ford Bridge (BPTCP station 47010.0).

Temporal Representation: The sample was collected in 1996.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program.

Numeric Line of Evidence Population/Community Degradation

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

Evaluation Guideline: Evaluation of the benthic data were completed using the approaches

developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the

benthic community (Anderson et al., 1998).

Data Used to Assess Water

Quality:

One benthic community sample with a benthic index of 0.21 (Anderson et

al., 1998).

Spatial Representation: One station at H. Ford Bridge (BPTCP station 47010.0).

Temporal Representation: The sample was collected in 1996.

Environmental Conditions: Adjacent waters (Consolidated Slip) also has degraded benthic

communities.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program (Stephenson et al., 1994).

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

Evaluation Guideline: A sediment quality guideline of 543.53 ng/g was used (MacDonald et al.,

1996).

Data Used to Assess Water

Quality:

Of 41 sediment core samples, 9 exceeded the sediment quality guideline

(LARWQCB and CCC, 2004).

Spatial Representation: Forty-one samples are spread throughout the water body.

Temporal Representation: The samples were collected in 2002.

Quality assurance is described in the Contaminated Sediments Task Force Database. Data Quality Assessment:

Water Segment: Dominguez Channel Estuary (unlined portion below Vermont Ave)

Pollutant: Polychlorinated biphenyls

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.9 of the Listing Policy. Under section 3.9 two lines of evidence

are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. A sufficient number of samples exceeded the sediment quality guideline. Although sediment toxicity has been observed it is not enough to establish a sufficiently strong association with the sediment pollutant concentration. However, significant benthic degradation has been recorded and this may be linked with this pollutant concentration in this water body segment.

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

This conclusion is based on the staff findings that:

- 1. Data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Fifteen of 42 samples exceeded the sediment quality guideline. These data exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Based on section 3.9 of the Listing Policy significant benthic impact has been documented and the pollutant in sediment may be linked to the observed impacts.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: All waters should be maintained free of toxic substances in concentrations that are toxic to, or that produce

detrimental physiological response in, human, plant, animal, or aquatic

life.

Evaluation Guideline: Samples were considered toxic if (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant

difference value.

Data Used to Assess Water

Quality:

One toxicity sample that showed 61 percent survival which is considered

toxic (Anderson et al., 1998).

Spatial Representation: One station at H. Ford Bridge (BPTCP station 47010.0).

Temporal Representation: The sample was collected in 1996.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program.

Numeric Line of Evidence Population/Community Degradation

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

Evaluation Guideline: Evaluation of the benthic data were completed using the approaches

developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the

benthic community (Anderson et al., 1998).

Data Used to Assess Water

Quality:

One benthic community sample with a benthic index of 0.21 (Anderson et

al., 1998).

Spatial Representation: One station at H. Ford Bridge (BPTCP station 47010.0).

Temporal Representation: The sample was collected in 1996.

Environmental Conditions: Adjacent waters (Consolidated Slip) also has degraded benthic

communities.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program (Stephenson et al., 1994).

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to

aquatic life or human health.

Evaluation Guideline: OEHHA screening value (20 ppb) (Brodberg & Pollock, 1999).

Data Used to Assess Water

Quality:

One fish tissue sample (white croaker collected in 1992) had total PCBs level (1780 ppb wet wt.) that far exceeds the OEHHA screening value (20

ppb).

Spatial Representation: TSM Station number 405.12.02

Temporal Representation: Collected in 1992. Data Quality Assessment: TSM dataset.

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Basin Plan: Surface waters shall not contain concentrations of chemical Water Quality Criterion:

constituents in amounts that adversely affect any designated beneficial

use.

Evaluation Guideline: A sediment quality guideline of 400 ng/g was used (Fairey et al., 2001).

Data Used to Assess Water

Quality:

Of 42 sediment core samples, 15 exceeded the sediment quality

guideline (LARWQCB and CCC, 2004).

Spatial Representation: Forty-two samples are spread throughout the water body.

The samples were collected in 2002. Temporal Representation:

Quality assurance is described in the Contaminated Sediments Task Data Quality Assessment:

Force Database.

Water Segment: Dominguez Channel Estuary (unlined portion below Vermont Ave)

Pollutant: Pyrene

**Decision:** List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under section 3.9 of the Listing Policy. Under section 3.9 two lines of evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. A sufficient number of samples exceeded the sediment quality guideline. Although sediment toxicity has been observed it is not enough to establish a sufficiently strong association with the sediment pollutant concentration. However, significant benthic degradation has been recorded and this may be linked with this pollutant concentration in this water body segment.

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

This conclusion is based on the staff findings that:

- 1. Data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Thirteen of 41 samples exceeded the sediment quality guideline. These data exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Based on section 3.9 of the Listing Policy significant benthic impact has been documented and the pollutant in sediment may be linked to the observed impacts.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: All waters should be maintained free of toxic substances in concentrations that are toxic to, or that produce

detrimental physiological response in, human, plant, animal, or aquatic

life.

Evaluation Guideline: Samples were considered toxic if (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant

difference value.

Data Used to Assess Water

Quality:

One toxicity sample that showed 61 percent survival which is considered

toxic (Anderson et al., 1998).

Spatial Representation: One station at H. Ford Bridge (BPTCP station 47010.0).

Temporal Representation: The sample was collected in 1996.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program.

Numeric Line of Evidence Population/Community Degradation

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

Evaluation Guideline: Evaluation of the benthic data were completed using the approaches

developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the

benthic community (Anderson et al., 1998).

Data Used to Assess Water

Quality:

One benthic community sample with a benthic index of 0.21 (Anderson et

al., 1998).

Spatial Representation: One station at H. Ford Bridge (BPTCP station 47010.0).

Temporal Representation: The sample was collected in 1996.

Environmental Conditions: Adjacent waters (Consolidated Slip) also has degraded benthic

communities.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program (Stephenson et al., 1994).

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

Evaluation Guideline: A sediment quality guideline of 1,397.4 ng/g was used (MacDonald et al.,

1996).

Data Used to Assess Water

Quality:

Of 41 sediment core samples, 13 exceeded the sediment quality

guideline (LARWQCB and CCC, 2004).

Spatial Representation: Forty-one samples are spread throughout the water body.

Temporal Representation: The samples were collected in 2002.

Quality assurance is described in the Contaminated Sediments Task Force Database. Data Quality Assessment:

Water Segment: Lake Lindero

Pollutant: Selenium

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of the 2 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at Water Quality Criterion: Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to

aquatic life or human health.

Evaluation Guideline: OEHHA Screening Value of 2 μg/g for selenium.

Data Used to Assess Water

Quality:

Two out of 2 samples exceeded. Two filet samples of largemouth bass and carp were collected. Bass were collected in 1992 and carp in 1998.

Both samples exceeded the guideline (TSMP, 2002).

Spatial Representation: One station located at Mainsail Cul-de-Sac off Lake Lindero Drive.

Temporal Representation: Samples were collected in 1992 and 1998.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 Data Report.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Water Segment: Los Angeles Harbor - Cabrillo Marina

Pollutant: DDT

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.4 of the Listing Policy. Under section 3.4 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. An OEHHA fish consumption advisory has been established in this water body segment. Under section 3.4 of the Listing Policy any water body segment where a health advisory against consumption of edible resident organisms has been issued shall be placed on the section 303(d) list.

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

This conclusion is based on the staff findings that an OEHHA fish consumption advisory has been established for this pollutant and fish tissue samples from nearby areas of the harbor (outer harbor) exceed the fish tissue guideline for human consumption. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because an OEHHA fish consumption advisory has been established in this water body segment. Applicable water quality standards or guidelines are exceeded and this pollutant contributes to or causes the problem.

#### **Lines of Evidence:**

**Line of Evidence** Health Advisories

Beneficial Use CM - Commercial and Sport Fishing (CA)

Information Used to Assess

Water Quality:

A fish consumption advisory has been established for the DDT in the Los Angeles/Long Beach Harbor area. The advisory was established by the

Office of Environmental Health Hazard Assessment.

Data Used to Assess Water

Quality:

This pollutant has been detected in samples collected in this water

segment.

Water Segment: Los Angeles Harbor - Cabrillo Marina

Pollutant: Polychlorinated biphenyls

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. An OEHHA fish consumption advisory has been established in this water body segment. Under section 3.4 of the Listing Policy any water body segment where a health advisory against consumption of edible resident organisms has been issues shall remain on the section 303(d) list. In this case, there are no current tissue data available for evaluation, however, fish tissue samples from nearby areas of the harbor (outer harbor) exceed the fish tissue guideline for human consumption.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of not removing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that an OEHHA fish consumption advisory has been established for this pollutant and fish tissue samples from nearby areas of the harbor (outer harbor) exceed the fish tissue guideline for human consumption.

Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because OEHHA fish consumption advisory has been established in this water body segment. Applicable water quality standards or guidelines are exceeded and this pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: CM - Commercial and Sport Fishing (CA), ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Basin Plan: Surface waters shall not contain concentrations of chemical water Quality Criterion: Constituents in amounts that adversely affect any designated beneficial

use (LARWQCB, 1995)

Evaluation Guideline: A sediment quality guideline of 400 µg/g was used (MacDonald et al.,

2000).

Data Used to Assess Water

Quality:

Water Quality:

Of the 11 sediment core samples available, none exceeded the sediment

quality guideline (LARWQCB and CCC, 2004).

Spatial Representation: The 11 samples are spread throughout the marina.

Temporal Representation: The samples were collected in 1995 and 2001.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program QAPP (Stephenson et al.,

1994)

Quality assurance for other samples presented in the Contaminated

Sediments Task Force Database.

**Line of Evidence** Health Advisories

Beneficial Use CM - Commercial and Sport Fishing (CA), ES - Estuarine Habitat

Information Used to Assess A fish consumption advisory has been established for the PCBs in the

Los Angeles/Long Beach Harbor area. The advisory was established by

the Office of Environmental Health Hazard Assessment.

Water Segment: Los Angeles Harbor - Fish Harbor

Pollutant: Chlordane

**Decision:** List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 two lines of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Sediment toxicity is observed and a sufficient number of samples exceeded the sediment quality guideline. Under section 3.6 documented pollutant exceedances in sediment must be associated with observed toxicity before listing can occur.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Four of 6 samples exceeded the 6 ng/L Chlordane ERM sediment quality guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. Also, 3 of 7 sediment toxicity samples were considered toxic. The Listing Policy requires evidence of observed toxicity to establish a connection between the pollutant in the sediment and toxicity impacts to the aquatic habitat in the water body segment.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff
Recommendation:

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

#### Lines of Evidence:

Numeric Line of EvidencePollutant-SedimentBeneficial Use:MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

Evaluation Guideline: An Effects Range-Median of 6 ng/g was used (Long and Morgan, 1990).

Data Used to Assess Water

Quality:

Of the six sediment core samples, 4 exceeded sediment quality guideline

(CSTF. 2002).

Spatial Representation: The samples were spread throughout the water body.

Temporal Representation: Samples were collected in 1999.

Data Quality Assessment: Quality assurance for other samples presented in the Contaminated

Sediments Task Force Database.

Numeric Line of Evidence Toxicity

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use.

Evaluation Guideline: Samples were considered toxic if (1) there was a significant difference in

mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant

difference value.

Data Used to Assess Water

Quality:

Overall, three of seven samples were toxic. This total was created from two different sediment studies within Fish Harbor. In one study, three of

six samples were toxic (BPTCP). In the other, none of one sample was

toxic (Bight, 1998) (LARWQCB & CCC, 2004).

Spatial Representation: Seven sites were sampled throughout LA/LB Fish Harbor.

Temporal Representation: Samples were collected in 1992, 1997 and 1998.

Data Quality Assessment: Contaminated Sediment Task Force (2005) and references therein

(BPTCP QAPP, Bight 98 QAPP).

Water Segment: Los Angeles Harbor - Inner Cabrillo Beach Area

Pollutant: Copper

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.6 of the Listing Policy. Under section 3.6 two lines of evidence

are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. A sufficient number of samples exceeded the sediment quality guideline and significant. Sediment toxicity has been documented within the water body segment.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Fourteen of 16 samples exceeded the 270  $\mu$ g/g ERM sediment quality guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. Based on section 3.6 of the Listing Policy sediment toxicity has been documented and the pollutant in sediment may be linked to the observed toxicity.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Basin Plan: Surface waters shall not contain concentrations of chemical Water Quality Criterion: Constituents in amounts that adversely affect any designated beneficial

use (LARWQCB, 1995)

Evaluation Guideline: An Effects Range-Median of 270 μg/g was used (Long et al., 1995).

Data Used to Assess Water

Quality:

Of the 16 sediment grab samples, 14 exceeded the sediment quality

guideline (LARWQCB and CCC, 2004).

Spatial Representation: The samples were spread throughout the Inner Cabrillo Beach area.

Temporal Representation: Samples were collected between 1992 and 1994.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program QAPP (Stephenson et al.,

1994).

**Numeric Line of Evidence** Toxicity

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use (LARWQCB, 1995)

Evaluation Guideline: Toxicity was assessed by statistical comparison to test control.

Data Used to Assess Water

Quality:

Seven of 52 sediment samples were toxic as compared to toxicity test

controls (Anderson et al., 1998).

Spatial Representation: The 52 samples were spread throughout the Inner Cabrillo Beach area.

Temporal Representation: The samples were collected between 1992 and 1997.

Data Quality Assessment: Bay Protection and Toxic Cleanup Program QAPP (Stephenson et al.,

1994).

Los Angeles River Reach 1 (Estuary to Carson Street) **Water Segment:** 

Cyanide Pollutant:

Decision: List

Weight of Evidence:

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

One line of evidence is available in the administrative record to assess this pollutant. A sufficient number of samples exceed the CTR -CCC concentration of 0.0052 mg/L.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Seven of 17 samples exceeded the CTR Criteria continuous Concentration and this exceeds the allowable frequency listed in Table 3.1 of the Listing
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

CTR Criteria Continuous Concentration of 0.0052 mg/L is the highest concentration of Cyanide to which aquatic life can be exposed for an extended period of time (four days) without deleterious effects applicable

to protect aquatic life BUs.

Data Used to Assess Water

Quality:

Numeric data generated from 17 samples taken from 10/30/00 to 4/30/03 at one to two-week sampling interval. Seven (7) samples exceeded the CTR continuous cvanide concentration criterion (LACDPW, 2003).

Spatial Representation: One sample site sampled during the dry and wet season beginning from

10/30/00 through 4/30/03 at approximately one to two week intervals.

Temporal Representation: Seventeen samples where taken during the wet and dry season from

10/30/00 to 4/30/03 at approximately one to two week intervals as part of the Los Angeles County Storm water monitoring program prepared by

the Los Angeles County Department of Public Works.

Environmental Conditions: The Los Angeles River Monitoring Station is located at the existing

stream gage station (Stream Gage No. F319-R) between Willow Street and Wardlow Road in the City of Long Beach. At this location, which was chosen to avoid tidal influences, the total upstream tributary drainage area for the Los Angeles River is 825 square miles. This river is the largest watershed outlet to the Pacific Ocean in Los Angeles County. At

the site, the river is a concrete lined trapezoidal channel.

Data Quality Assessment: Evaluation of Analytes and QA/QC Specifications for Monitoring Program

(Woodward-Clyde, 1996) Los Angeles County Department of Public

Works.

Water Segment: Los Angeles River Reach 1 (Estuary to Carson Street)

Pollutant: Diazinon

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A sufficient number of samples exceed the DFG Diazinon fresh water hazard assessment criteria used to interpret the basin plan narrative

water quality objective.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of 22 samples exceeded the chronic DFG Diazinon fresh water hazard assessment criteria and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

SWRCB Staff Recommendation:

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

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan Narrative WQO for pesticides

Evaluation Guideline: Numerical Diazinon guideline used to interpret Basin Plan narrative

pesticide WQO. The numeric guidelines are 0.10  $\mu$ g/L 4-day average and 0.16  $\mu$ g/L 1-hour average generated by DFG as a fresh water hazard assessment criteria for the protection of aquatic life (Siepman &

Finlayson, 2000; Finlayson, 2004).

Data Used to Assess Water

Quality:

Numeric data generated from 22 samples taken from 10/12/00 to 4/30/03 at one to two-week sampling interval. All of the data reported from 2000 through the end of 2002 did not detect Diazinon. In 10/10/02 during the dry season, and 2/11/03 during the wet season, two (2) samples exceeded the chronic DFG fresh water hazard assessment criteria (one of which also exceeded the acute criteria) for the protection of aquatic life (LACDPW, 2004c).

Spatial Representation:

One sample site sampled during the dry and wet season beginning from 10/12/00 through 4/30/03 at approximately one to two week intervals.

Temporal Representation:

Twenty two samples where taken during the wet and dry season from 10/12/00 to 4/30/03 at approximately one to two week intervals as part of the Los Angeles County Storm water monitoring program prepared by the Los Angeles County Department of Public Works.

Environmental Conditions:

The Los Angeles River Monitoring Station is located at the existing stream gage station (Stream Gage No. F319-R) between Willow Street and Wardlow Road in the City of Long Beach. At this location, which was chosen to avoid tidal influences, the total upstream tributary drainage area for the Los Angeles River is 825 square miles. This river is the largest watershed outlet to the Pacific Ocean in Los Angeles County. At the site, the river is a concrete lined trapezoidal channel.

Data Quality Assessment:

Evaluation of Analytes and QA/QC Specifications for Monitoring Program (Woodward-Clyde, 1996) Los Angeles County Department of Public Works.

Los Cerritos Channel **Water Segment:** 

Bis(2ethylhexyl)phthalate Pollutant:

Decision: List

Weight of Evidence:

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

One line of evidence is available in the administrative record to assess this pollutant. A sufficient number of samples exceed the CTR criterion to protect human health from carcinogenic risk.

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

This conclusion is based on the staff findings that:

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

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

CTR criterion of 1.8 µg/L applicable to protect human health from carcinogenic risk due to consumption of water and organisms in all surface waters of the state, which are not bays, estuaries, or ocean that

include a MUN use designation.

Data Used to Assess Water

Quality:

Numeric data generated from four samples taken in two sampling sites (Bouton Creek and Los Cerritos Channel monitoring stations in 11/01). Two samples exceeded the CTR value (City of Long Beach, 2003).

Spatial Representation: Two sampling sites (Bouton Creek and Los Cerritos Channel Monitoring

Stations).

Temporal Representation: Samples were taken during 11/12/01 and 11/24/01. Environmental Conditions: Samples were taken during wet weather season.

Data Quality Assessment: City of Long Beach Storm Water Monitoring Program QAPP 2002.

Water Segment: Malibu Creek

Pollutant: Selenium

Decision: List

Weight of Evidence:

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

One line of evidence is available in the administrative record to assess this pollutant. A sufficient number of samples exceed the CTR total selenium criterion for continuous concentration.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Five of 20 samples exceeded the CTR criterion for total selenium and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

CTR total selenium criterion for continuous concentration in water for the protection of aquatic life is  $5.0~\mu g/L$ . The criterion is linked and applicable

for the protection of aquatic life Beneficial Uses.

Data Used to Assess Water

Quality:

Numeric data generated from 20 samples taken from 10/28/00 to 4/30/03 at one to two-week sampling interval. Five (5) samples exceeded the CTR continuous total selenium concentration criterion (LACDPW, 2004c).

Spatial Representation: One sample site sampled during the dry and wet season beginning from

10/28/00 through 4/30/03 at approximately one to two week intervals.

Temporal Representation: Twenty samples where taken during the wet and dry season from

10/12/00 to 4/30/03 at approximately one to two week intervals as part of the Los Angeles County Storm water monitoring program prepared by

the Los Angeles County Department of Public Works.

Environmental Conditions: The Malibu Creek monitoring station is located at the existing stream

gage station (Stream Gage No. F130-9-R) near Malibu Canyon Road, south of Piuma Road. At this location, the tributary watershed to Malibu Creek is 104.9 square miles. The entire Malibu Creek Watershed is

109.9 square miles.

Data Quality Assessment: Evaluation of Analytes and QA/QC Specifications for Monitoring Program

(Woodward-Clyde, 1996) Los Angeles County Department of Public

Works.

Water Segment: Malibu Creek

Pollutant: Sulfates

Decision: List

Weight of Evidence:

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

Two lines of evidence are available in the administrative record to assess this pollutant. A sufficient number of samples exceed the MCL guideline for Sulfate.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Nine of a combined total of 22 samples taken from 10/00 to 3/04 exceeded the MCL and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan Water Quality Objective of 500 mg/L is linked and applicable

for the protection of MUN.

Data Used to Assess Water Quality:

Numeric data generated from 20 samples taken from 10/28/00 to 4/30/03 at one to two-week sampling interval. Seven (7) samples exceeded the

Basin Plan Objective for Sulfate (LACDPW, 2004c).

Spatial Representation: One sample site sampled during the dry and wet season beginning from

10/28/00 through 4/30/03 at approximately one to two week intervals.

Temporal Representation: Twenty samples where taken during the wet and dry season from

10/28/00 to 4/30/03 at approximately one to two week intervals as part of the Los Angeles County Storm water monitoring program prepared by

the Los Angeles County Department of Public Works.

Environmental Conditions: The Malibu Creek monitoring station is located at the existing stream

gage station (Stream Gage No. F130-9-R) near Malibu Canyon Road, south of Piuma Road. At this location, the tributary watershed to Malibu Creek is 104.9 square miles. The entire Malibu Creek Watershed is

109.9 square miles.

Data Quality Assessment: Evaluation of Analytes and QA/QC Specifications for Monitoring Program

(Woodward-Clyde, 1996) Los Angeles County Department of Public

Works.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Water Quality Criterion: CCR- Title 22 Table 64449-B Secondary Maximum Contaminant Levels

of 250 mg/L for sulfate.

Data Used to Assess Water

Quality:

Two samples with two exceeding (SWAMP, 2004).

Spatial Representation: One station at Malibu Creek: 34.0429 -118.6842.

Temporal Representation: Samples were collected March 2003 through March 2004.

Environmental Conditions: Malibu Creek Watershed: 404.21.

Data Quality Assessment: SWAMP Quality Assurance Plan.

Water Segment: Piru Creek (from gaging station below Santa Felicia Dam to headwaters)

Pollutant: Chloride

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A sufficient number of samples exceed the site specific chloride

water quality objective.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Eight of 12 samples exceeded the site specific chloride water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply

Matrix: Water

Water Quality Objective/ Water Quality Criterion: The Basin Plan Site Specific Water Quality Objective for Piru Creek (Tributary to Santa Clara River, Reach 4, shall not exceed 60 mg/L for

the protection of Agricultural supply (AGR) BUs.

Data Used to Assess Water Quality:

Numeric data generated from a total of twelve samples taken from below the Santa Felicia Dam, from July 2001 through April 2004 on a quarterly basis throughout the Year. Eight samples exceeded the site specific WQO for Piru Creek tributary to Santa Clara River, Reach 4 (LACSD, 2004b).

Spatial Representation: One sampling station sampled from July 2001 through April 2004.

Temporal Representation: Twelve samples taken on a quarterly basis from July 2001 through April

2004.

Environmental Conditions: Results are from samples taken from July 2001 through April 2004 below

Santa Felicia Dam.

Data Quality Assessment: Fruit Growers Laboratory Quality Manual.

Port Hueneme Pier **Water Segment:** 

Polychlorinated biphenyls Pollutant:

Decision: List

This pollutant is being considered for placement on the section 303(d) list Weight of Evidence:

under section 3.5 of the Listing Policy. Under section 3.5 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this

pollutant. Most of the samples exceed the water quality objective.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of 3 samples exceeded the water quality objective and this exceeds

the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff **Recommendation:**  After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at Water Quality Criterion:

levels that will bioaccumulate in aquatic life to levels which are harmful to

aquatic life or human health.

Evaluation Guideline: 20 ng/g (OEHHA Screening Value).

Data Used to Assess Water

Quality:

Two out of 3 samples exceeded. All 3 samples were filet composites representing the following species: barred surfperch, speckled sanddab.

and walleye surfperch (TSMP, 2002).

Spatial Representation: One station was sampled. Temporal Representation: Samples were collected in April and October 1999.

Data Quality Assessment: CFCP 1998 Year 1 QA Summary - Pesticides and PCBs. California

Department of Fish and Game. CDFG Fish and Wildlife Water Pollution Control Laboratory Data Quality Assurance Report. 1999 Coastal Fish Contamination Program (CFCP Year 2). California Department of Fish

and Game.

Water Segment: San Gabriel River Reach 1 (Estuary to Firestone)

Pollutant: pH

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.2 of the Listing Policy. Under section 3.2 a single line of

evidence is necessary to assess listing status.

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

objective.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Eighty-five of 284 samples exceeded the pH water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

# SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Basin Plan: The pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges. Ambient

pH levels shall not be changed more than 0.5 units from natural

conditions as a result of waste discharge.

Data Used to Assess Water

Quality:

Eighty-five samples of 284 total samples exceed the pH objective

(LACSD, 2004b).

Spatial Representation: Six stations.

Temporal Representation: Measurements were taken weekly between June 2003 and November

2004.

Data Quality Assessment: NPDES quality assurance.

Water Segment: Santa Clara River Reach 1 (Estuary to Hwy 101 Bridge)

**Pollutant:** Toxicity

Decision: List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 a water segment can be placed on the 303(d) list if the water segment exhibits significant toxicity and the observed toxicity is associated with a pollutant or pollutants. The water body segment may also be listed for toxicity alone.

One line of evidence is available in the administrative record to assess this pollutant. A sufficient number of samples exceed the evaluation guideline for toxicity and thus the basin plan narrative water quality objective.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Two of 2 samples exhibited significant USEPA 7-day Ceriodaphnia dubia test and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

# SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: ES - Estuarine Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration shall determine compliance with this objective, or other appropriate methods as specified by the

Regional Board.

Evaluation Guideline: Toxicity samples were tested using the 7-day Ceriodaphnia dubia test,

EPA 1994.

Data Used to Assess Water

Quality:

Two of two toxicity samples with significant results compared to negative control based on statistical test, alpha of less than 5%, and less than the

evaluation threshold (SWAMP, 2004).

Spatial Representation: One station: 34.23556 -119.24083.

Temporal Representation: Samples were taken in November 2001, February 2003

Environmental Conditions: Santa Clara River Estuary-Between Highway 101 Bridge and Santa

Clara River Estuary.

Data Quality Assessment: SWAMP Quality Assurance Plan.

Water Segment: Santa Clara River Reach 11 (Piru Creek, from confluence with Santa Clara

River Reach 4 to gaging station below Santa Felicia Dam)

Pollutant: Boron

**Decision:** List

**Weight of Evidence:** This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A sufficient number of samples exceed the Inland Surface Waters Site Specific Water Quality Objectives of 1.0 mg/L for boron on Table 3.8 of the Basin Plan.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three of 3 samples exceeded the Site Specific Water Quality Objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

SWRCB Staff Recommendation:

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

#### **Lines of Evidence:**

Quality:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply

Matrix: Water

Water Quality Objective/ Water Quality Objectives for Selected Constituents in Inland Surface

Water Quality Criterion: Waters shown in the Basin Plan on Table 3-8 (1.0 mg/L).

Data Used to Assess Water Three water samples; three samples exceeding the objective (SWAMP,

2004).

Spatial Representation: Three sampling stations.

Temporal Representation: Samples were collected in February through June 2003.

Santa Clara River Segment 11. Piru Creek above gauging station below Santa Felicia Dam. **Environmental Conditions:** 

SWAMP Quality Assurance Plan. Data Quality Assessment:

Santa Clara River Reach 11 (Piru Creek, from confluence with Santa Clara **Water Segment:** 

River Reach 4 to gaging station below Santa Felicia Dam)

Pollutant: Sulfates

List Decision:

This pollutant is being considered for placement on the section 303(d) list Weight of Evidence:

under section 3.2 of the Listing Policy. Under section 3.2 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A sufficient number of samples exceed the exceed the Inland Surface Waters Site Specific Water Quality Objectives of 400 mg/L for Sulfate

on table 3.8 of the Basin Plan.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Six of 13 samples exceeded the Site Specific Water Quality Objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply

Water Matrix:

Water Quality Objective/ Water Quality Objectives for Selected Constituents in Inland Surface Water Quality Criterion: Waters shown in Table 3-8 of the Basin Plan (400 mg/L).

Thirteen samples with 6 samples exceeding (SWAMP, 2004). Data Used to Assess Water

Quality:

Spatial Representation: Nine sampling stations.

Temporal Representation: Samples were collected in February through June 2003.

Santa Clara River Segment 11. Piru Creek above gauging station below Santa Felicia Dam. **Environmental Conditions:** 

Data Quality Assessment: SWAMP Quality Assurance Plan.

Water Segment: Santa Clara River Reach 6 (W Pier Hwy 99 to Bouquet Cyn Rd) (was named

Santa Clara River Reach 8 on 2002 303(d) lists)

Pollutant: Diazinon

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A sufficient number of samples exceed the CDFG Diazinon Aquatic life toxicity guidelines of 0.08 mg/L one hour average and the 0.05 mg/L 4 day average.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Twenty-eight of 29 samples exceeded the CDFG guidelines and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: No individual pesticide or combination of pesticides shall be present in

concentrations that adversely affect beneficial uses.

Evaluation Guideline: CDFG Hazard Assessment Criteria 0.16 μg/L 1-hour average (acute),

 $0.10~\mu g/L$  4-day (chronic) average (Siepman & Finlayson, 2000;

Finlayson, 2004).

Data Used to Assess Water Twenty-eight of 29 samples exceed the guideline (SWAMP, 2004).

Quality:

Spatial Representation: Six stations.

Temporal Representation: Samples were collected from August 2002 through April 2003.

The Santa Clara River Reach 6 monitoring stations are located between Bouquet Canyon Road Bridge and West Point Highway 99. **Environmental Conditions:** 

Data Quality Assessment: SWAMP Quality Assurance Plan.

Water Segment: Santa Clara River Reach 6 (W Pier Hwy 99 to Bouquet Cyn Rd) (was named

Santa Clara River Reach 8 on 2002 303(d) lists)

Pollutant: Toxicity

**Decision:** List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 a water segment can be placed on the 303(d) list if the water segment exhibits significant toxicity and the observed toxicity is associated with a pollutant or pollutants. The water body segment may also be listed for toxicity alone.

One line of evidence is available in the administrative record to assess this pollutant. A sufficient number of samples exceed 7-day Ceriodaphnia dubia test and thus the narrative water quality objective.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Four of 4 samples exhibited significant Ceriodaphnia toxicity and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and

information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, MU - Municipal & Domestic, SP - Fish

Spawning, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration shall determine compliance

with this objective, or other appropriate methods as specified by the

Regional Board.

Evaluation Guideline: Toxicity samples tests using the 7-day Ceriodaphnia dubia test.

Data Used to Assess Water

Quality:

Four of 4 toxicity samples with significant results compared to negative control based on statistical test, alpha of less than 5%, and less than the

evaluation threshold (SWAMP, 2004).

Spatial Representation: One station located at 34.42782 -118.54022.

Temporal Representation: Samples were taken in November 2001, February 2003.

Environmental Conditions: The Santa Clara River Reach 6 monitoring stations are located between

Bouquet Canyon Road Bridge and West Point Highway 99.

Data Quality Assessment: SWAMP Quality Assurance Plan.

Water Segment: Sawpit Creek

**Pollutant:** Bis(2ethylhexyl)phthalate

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.1 of the Listing Policy. Under section 3.1 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A sufficient number of samples exceed the CTR 1.8  $\mu$ g/L human health criterion for the risk of carcinogens due to consumption of water and organisms.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Six of 7 samples exceeded the CTR criterion and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: GW - Groundwater Recharge, MI - Fish Migration, MU - Municipal &

Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: CTR criteria 1.8 µg/L (ppb) Human Health Freshwater (USEPA, 2000).

Data Used to Assess Water

Quality:

Six of seven samples exceeded the CTR criteria for Bis(2-

ethylhexyl)phthalate (LACDPW, 2004c).

Spatial Representation: Samples were collected from seven sites.

Samples were collected in November 2000, January, February, and Temporal Representation:

March 2001.

**Environmental Conditions:** Samples were collected during storm events.

Los Angeles Department of Public Works: Evaluation of analytes and QA/QC specification for Monitoring Programs. The report also included QA/QC Equivalent:

quality control data.

Water Segment: Sawpit Creek

Pollutant: Fecal Coliform

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.3 of the Listing Policy. Under section 3.3 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A sufficient number of samples exceed the 400 MPN/100 ml fresh water single sample limit water quality objective for the protection of RE1

Beneficial Uses.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Five of 6 samples exceeded the fecal coliform 400 MPN/100 ml water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: GW - Groundwater Recharge, MI - Fish Migration, MU - Municipal &

Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan WQO: 400 MPN/100 ml fecal coliform.

Data Used to Assess Water

Quality:

Five of six samples exceeded the fecal coliform objective (LACDPW.

2004c).

Spatial Representation: Samples were collected from six sample sites

Samples were collected in November 2000, January, February, and Temporal Representation:

March 2001.

**Environmental Conditions:** Samples were collected during storm events.

Los Angeles Department of Public Works: Evaluation of analytes and QA/QC specification for Monitoring Programs. QA/QC Equivalent:

Water Segment: Ventura Marina Jetties

Pollutant: DDT

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of the 6 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

SWRCB Staff Recommendation:

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

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to

aquatic life or human health.

Evaluation Guideline: 100 ng/g (OEHHA Screening Value) (Brodberg & Pollock, 1999).

Data Used to Assess Water

Quality:

Two of 6 samples exceeded. All 6 samples were filet composites

representing the following species: Rainbow surfperch, shiner surfperch,

white surfperch, and white croaker (TSMP, 2002).

Spatial Representation: One station was sampled.

Temporal Representation: Samples were collected in September 1999.

Data Quality Assessment: CFCP 1998 Year 1 QA Summary - Pesticides and PCBs. California

Department of Fish and Game. CDFG Fish and Wildlife Water Pollution Control Laboratory Data Quality Assurance Report. 1999 Coastal Fish Contamination Program (CFCP Year 2). California Department of Fish

and Game.

Water Segment: Ventura Marina Jetties

Pollutant: Polychlorinated biphenyls

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

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

Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of the 6 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

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

SWRCB Staff Recommendation:

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

pollutant contributes to or causes the problem.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to

aquatic life or human health.

Evaluation Guideline: 20 ng/g (OEHHA Screening Value) (Brodberg & Pollock, 1999).

Data Used to Assess Water

Quality:

Two of 6 samples exceeded. All 6 samples were filet composites representing the following species: Rainbow surfperch, shiner surfperch, white surfperch, and white croaker. Shiner surfperch and white croaker

from the Ventura Marina Jetty exceeded guideline (TSMP, 2002).

Spatial Representation: One station was sampled.

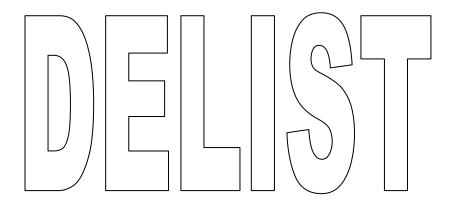
Temporal Representation: Samples were collected in July and September 1999.

Data Quality Assessment: CFCP 1998 Year 1 QA Summary - Pesticides and PCBs. California

Department of Fish and Game. CDFG Fish and Wildlife Water Pollution Control Laboratory Data Quality Assurance Report. 1999 Coastal Fish Contamination Program (CFCP Year 2). California Department of Fish

and Game.

# Los Angeles Region (4)



Recommendations to remove waters and pollutants from the section 303(d) List

Water Segment: Arroyo Seco Reach 1 (LA River to West Holly Ave.)

Pollutant: Excess Algal Growth

**Decision:** Delist

Weight of Evidence: This condition is being considered for listing under section 2.2 of the Listing

Policy. Under this section of the Policy, a minimum of two lines of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this water body condition. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Qualitative information on excess algal growth alone is not sufficient to support placement on the section 303(d) list (Listing Policy section

3.7).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should not be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because algal growth is not a pollutant, and it is uncertain if the growth data are backed by pollutant data showing exceedances of water quality standards.

#### Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR2 - Non-Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004. This TMDL will address this water body condition.

Water Segment: Ballona Creek

Pollutant: pH

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.2 of the Listing Policy. Under section 4.2 a single line of

evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. There are exceedances of the pH basin plan water quality objective in both lines of evidence.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Five of 40 samples exceeded the pH WQO in one line of evidence and 1 of 22 exceeded in the other. The first line of evidence does not exceeds the allowable frequency listed in Table 4.2 of the Listing Policy and there were insufficient number of samples taken in the other data set to make an appropriate determination
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan WQO for inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waster discharges to protect

aquatic life BUs.

Data Used to Assess Water

Quality:

Numeric data generated from 22 samples taken from 10/12/00 to 4/30/03 at one to two-week sampling interval. Four (4) samples exceeded the

Basin Plan WQO (LACDPW, 2004c; 2004d).

Spatial Representation: One sample site sampled during the dry and wet season beginning from

10/12/00 through 4/30/03 at approximately one to two week intervals.

Temporal Representation: Twenty-two samples where taken during the wet and dry season from

10/12/00 to 4/30/03 at approximately one to two week intervals as part of the Los Angeles County Storm water monitoring program prepared by

the Los Angeles County Department of Public Works.

Environmental Conditions: Data 1-5 years old, environmental data measured at site, samples

collected during multiple seasons. The Ballona Creek monitoring station is located at the existing stream gage station (Stream Gage No. F38C-R) between Sawtelle Boulevard and Sepulveda Boulevard in the City of Los Angeles. At this location, which was chosen to avoid tidal influences, the upstream tributary watershed of Ballona Creek is 88.8 square miles. The entire Ballona Creek Watershed is 127.1 square miles. At the gauging

station, Ballona Creek is a concrete lined trapezoidal channel.

Data Quality Assessment: Evaluation of Analytes and QA/QC Specifications for Monitoring Program

(Woodward-Clyde, 1996) Los Angeles County Department of Public

Works.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Basin Plan WQO for inland surface waters shall not be depressed below

Water Quality Criterion: 6.5 or raised above 8.5 as a result of waster discharges to protect

aquatic life BUs.

Data Used to Assess Water

Quality:

Five of 40 samples exceeded the water quality objective (SWRCB,

2003).

Spatial Representation: One site.

Temporal Representation: Fall and spring.

Data Quality Assessment: Los Angeles County Stormwater Program.

Water Segment: Burbank Western Channel

Pollutant: Cadmium

**Decision:** Delist

Weight of Evidence: This

This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Two samples in one sampling station exceed the CTR Dissolved Cadmium Criterion for continuous concentration (CCC) in water for the protection of aquatic life.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Two out of 95 samples exceeded the dissolved cadmium continuous criterion concentration and this does not exceed the maximum allowable frequency listed in Table 4.1 of the Listing Policy.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: CTR Dissolved Cadmium Criterion for continuous concentration (CCC) in water for the protection of aquatic life is expressed as a function of the total hardness of the water body. The aquatic life criteria will vary depending of total hardness reported at the sampling site. The CCC for dissolved cadmium is the highest concentration to which aquatic life can be exposed for an extended period of time (four days) without deleterious effects. This criterion is linked and applicable for the protection of aquatic

life Beneficial Uses.

Data Used to Assess Water

Quality:

Numeric data generated from a total of 95 samples taken at four different Burbank Western Channel sampling stations (sampling stations R1, R1.5, R2 and R5) covering a period from March 2002 to May 2004 at monthly sampling intervals. Two samples in station R5 taken 10/7/03 exceeded the dissolved cadmium continuous criterion concentration (City

of Burbank, 2004).

Spatial Representation: Four Sample sites at receiving water stations consistent with the Burbank

Water Reclamation Plant NPDES permit which included receiving water stations both upstream (R1) and downstream (R1.5, R2, and R5) of the

reclamation plant and the BWP power plan discharges.

Temporal Representation: A total of 95 samples were taken at four sites during 2002 and 2004 at

monthly sampling intervals.

Data Quality Assessment: Standard Operating Procedures for Receiving Water Monitoring, Burbank

Western Channel (United Water Burbank Water Reclamation Plant).

Line of Evidence

Remedial Program in Place

Beneficial Use

WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Metals/Toxics TMDL was approved by the RWQCB in 2005 and subsequently approved

by USEPA in 2005.

Water Segment: Burbank Western Channel

Pollutant: Excess Algal Growth

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

The original line of evidence supporting the listing does not identify a pollutant but rather, a condition caused by a pollutant(s) (algal growth, foam, and odors). A TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004 and this TMDL is

expected to address this water body condition.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this listing from the 303(d) Water Quality Limited Segment list because the segment

pollutant combinations is not a pollutant.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the pollutant is an ambient condition caused by

pollutant(s). A TMDL is in place and is expected to address this water body

condition.

#### Lines of Evidence:

Numeric Line of Evidence Adverse Biological Responses

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Dissolved Oxygen Water Quality Objective of all surface waters

Water Quality Criterion: designated as Warm Fresh Water Aquatic Habitat shall not be depressed

below 5mg/L.

Data Used to Assess Water

Quality:

Numeric data generated from six samples out of which one sample

exceeded the WQO for protection of Warm Fresh Water Aquatic Habitat

(SWRCB, 2003).

Spatial Representation: One (1) sample site.

Temporal Representation: Six monthly samples, Five (5) taken during the wet season (11/08/2002-

03/15/2003) and one (1) sample taken during the dry season

(04/30/2003).

Environmental Conditions: Data Age, 1-2 years.

Data Quality Assessment: Evaluation of Analytes and QA/QC Specifications for Monitoring Program

(Woodward-Clyde, 1996) Los Angeles County Department of Public

Works.

Line of Evidence Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004. This TMDL will address this

water body condition.

Water Segment: Burbank Western Channel

Pollutant: Scum/Foam-unnatural

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

The original line of evidence supporting the listing does not identify a pollutant but rather, a condition caused by a pollutant(s) (algal growth, foam, and odors). A TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004 and this TMDL is

expected to address this water body condition.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303(d) Water Quality Limited Segment list because the segment

pollutant combinations is not a pollutant.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the listing is for an ambient condition caused by

pollutant(s). A TMDL is in place and is expected to address this water body

condition.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: One hour average Basin Plan Water Quality Objectives for ammonia-N was revised in 2002. For freshwaters not designated cold freshwater habitat and/or fish migration, the ammonia WQO is dependent on pH and fish species, but not temperature. The 30-day average WQO for waters not designated for spawning are dependent on pH and temperature. These WQO's have been adopted into the Basin Plan and are linked and

applicable to protection of aquatic life beneficial uses.

Data Used to Assess Water

Quality:

Two out of 33 samples exceeded Basin Plan Water Quality objectives for

ammonia-N, revised in 2002 (City of Burbank, 2006).

Spatial Representation: Samples were collected at three sites: R1-at the confluence of the

Burbank Western Channel and Lockheed Channel about 50 feet above the Burbank Water Reclamation Plant, R2- Burbank Western Wash at Verdugo Avenue, and R5- Burbank Western Wash just upstream from

the confluence with the Los Angeles River.

Temporal Representation: Three samples were taken on one day every third month starting on

5/6/2003 to 11/1/ 2005.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: One hour average Basin Plan Water Quality Objectives for ammonia-N was revised in 2002. For freshwaters not designated cold freshwater habitat and/or fish migration, the ammonia WQO is dependent on pH and fish species, but not temperature. The 30-day average WQO for waters not designated for spawning are dependent on pH and temperature. These WQO's have been adopted into the Basin Plan and are linked and applicable to protection of aquatic life beneficial uses.

Data Used to Assess Water

Quality:

Numeric data generated from 27 samples taken from 5/7/02 to 5/25/04 at two to three monthly intervals. No sample exceeded the Basin Plan ammonia WQO. Data was compared against 2002 adopted ammonia WQO of which the 1-hour average objective is dependent on pH and fish species and the 30-day average is dependent on pH and temperature. It was not possible to determine any exceedances of the 1-hour average WQO or the 30-day average because pH and temperature data was not provided (City of Burbank, 2004).

Spatial Representation: Four sample sites sampled from May 2002 through May 2004 at two to

three monthly intervals.

Temporal Representation: Twenty seven samples were taken at three sampling stations.

Environmental Conditions: Data was collected from May 2002 through May 2004 at 3 sampling

stations. Sampling station R1 is located at the confluence of Burbank Western Channel and Lockheed Channel about 50 feet above the Burbank Reclamation Plant. Station R2 is located at Burbank Western Wash at Verdugo Avenue. Station R5 is located at Burbank Western

Wash just upstream from the confluence with the L.A. River.

Data Quality Assessment: Standard Operating Procedures for Receiving Water Monitoring, Burbank

Western Channel (United Water Burbank Water Reclamation Plant).

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently

approved by USEPA on March 18, 2004.

Water Segment: Burbank Western Channel

Pollutant: Taste and odor

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

The original line of evidence supporting the listing does not identify a pollutant but rather, a condition caused by a pollutant(s) (algal growth, foam, and odors). A TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004 and this TMDL is

expected to address this water body condition.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303 (d) Water Quality Limited Segment list because the segment

pollutant combinations is not a pollutant.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the pollutant is an ambient condition caused by

pollutant(s). A TMDL is in place and is expected to address this water body

condition.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: One hour average Basin Plan Water Quality Objectives for ammonia-N was revised in 2002. For freshwaters not designated cold freshwater habitat and/or fish migration, the ammonia WQO is dependent on pH and fish species, but not temperature. The 30-day average WQO for waters not designated for spawning are dependent on pH and temperature. These WQO's have been adopted into the Basin Plan and are linked and

applicable to protection of aquatic life beneficial uses.

Data Used to Assess Water

Quality:

Two out of 33 samples exceeded Basin Plan Water Quality objectives for

ammonia-N, revised in 2002 (City of Burbank, 2006).

Spatial Representation: Samples were collected at three sites: R1-at the confluence of the

Burbank Western Channel and Lockheed Channel about 50 feet above the Burbank Water Reclamation Plant, R2- Burbank Western Wash at Verdugo Avenue, and R5- Burbank Western Wash just upstream from

the confluence with the Los Angeles River.

Temporal Representation: Three samples were taken on one day every third month starting on

5/6/2003 to 11/1/ 2005.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: One hour average Basin Plan Water Quality Objectives for ammonia-N was revised in 2002. For freshwaters not designated cold freshwater habitat and/or fish migration, the ammonia WQO is dependent on pH and fish species, but not temperature. The 30-day average WQO for waters not designated for spawning are dependent on pH and temperature. These WQO's have been adopted into the Basin Plan and are linked and applicable to protection of aquatic life beneficial uses.

Data Used to Assess Water

Quality:

Numeric data generated from 27 samples taken from 5/7/02 to 5/25/04 at two to three monthly intervals. No sample exceeded the Basin Plan ammonia WQO. Data was compared against 2002 adopted ammonia WQO of which the 1-hour average objective is dependent on pH and fish species and the 30-day average is dependent on pH and temperature. It was not possible to determine any exceedances of the 1-hour average WQO or the 30-day average because pH and temperature data was not provided (City of Burbank, 2004).

Spatial Representation: Four sample sites sampled from May 2002 through May 2004 at two to

three monthly intervals.

Temporal Representation: Twenty seven samples were taken at three sampling stations.

Environmental Conditions: Data was collected from May 2002 through May 2004 at 3 sampling

stations. Sampling station R1 is located at the confluence of Burbank Western Channel and Lockheed Channel about 50 feet above the Burbank Reclamation Plant. Station R2 is located at Burbank Western Wash at Verdugo Avenue. Station R5 is located at Burbank Western

Wash just upstream from the confluence with the L.A. River.

Data Quality Assessment: Standard Operating Procedures for Receiving Water Monitoring, Burbank

Western Channel (United Water Burbank Water Reclamation Plant).

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently

approved by USEPA on March 18, 2004.

Water Segment: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon

to Central Avenue on 1998 303d list)

Pollutant: Excess Algal Growth

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

The original line of evidence supporting the listing does not identify a pollutant but rather, a condition caused by a pollutant(s) (excess algal growth). A TMDL was approved by RWQCB on October, 2002 and subsequently approved by USEPA on June, 2003 and this TMDL is expected to address this water body

condition.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303(d) Water Quality Limited Segment list because the segment

pollutant combinations is not a pollutant.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the pollutant is an ambient condition caused by

pollutant(s). A TMDL is in place and is expected to address this water body

condition.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

implementation plan. USEPA approved the TMDL on June 20, 2003. This

Water Segment: Calleguas Creek Reach 5 (was Beardsley Channel on 1998 303d list)

Pollutant: Excess Algal Growth

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

The original line of evidence supporting the listing does not identify a pollutant but rather, a condition caused by a pollutant(s) (excess algal growth). A TMDL was approved by RWQCB on October, 2002 and subsequently approved by USEPA on June, 2003 and this TMDL is expected to address this water body

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303 (d) Water Quality Limited Segment list because the segment

pollutant combinations is not a pollutant.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the pollutant is an ambient condition caused by

pollutant(s). A TMDL is in place and is expected to address this water body

condition.

condition.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

implementation plan. USEPA approved the TMDL on June 20, 2003. This

Water Segment: Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2 on

1998 303d list)

Pollutant: Excess Algal Growth

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

The original line of evidence supporting the listing does not identify a pollutant but rather, a condition caused by a pollutant(s) (algal growth). A TMDL was approved by RWQCB on October, 2002 and subsequently approved by USEPA on June, 2003 and this TMDL is expected to address this water body

condition.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303 (d) Water Quality Limited Segment list because the segment

pollutant combinations is not a pollutant.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the pollutant is an ambient condition caused by

pollutant(s). A TMDL is in place and is expected to address this water body

condition.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR2 - Non-Contact Recreation

Schollolal Coc 12 11011 Contact (Corcatio

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

implementation plan. USEPA approved the TMDL on June 20, 2003. This

Water Segment: Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo

Crk Reaches 2 & 3, and lower Conejo Crk/Arroyo Conejo N Fk on 1998 303d

list)

Pollutant: Excess Algal Growth

Decision: Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

The original line of evidence supporting the listing does not identify a pollutant but rather, a condition caused by a pollutant(s) (algal growth). A TMDL was approved by RWQCB on October, 2002 and subsequently approved by USEPA on June, 2003 and this TMDL is expected to address this water body

condition.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303(d) Water Quality Limited Segment list because the segment

pollutant combinations is not a pollutant.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the pollutant is an ambient condition caused by

pollutant(s). A TMDL is in place and is expected to address this water body

condition.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

implementation plan. USEPA approved the TMDL on June 20, 2003. This

Water Segment: Calleguas Creek Reach 11 (Arroyo Santa Rosa, was part of Conejo Creek

Reach 3 on 1998 303d list)

Pollutant: Excess Algal Growth

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

The original line of evidence supporting the listing does not identify a pollutant but rather, a condition caused by a pollutant(s) (algal growth). A TMDL was approved by RWQCB on October, 2002 and subsequently approved by USEPA on June, 2003 and this TMDL is expected to address this water body

condition.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303(d) Water Quality Limited Segment list because the segment

pollutant combinations is not a pollutant.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the pollutant is an ambient condition caused by

pollutant(s). A TMDL is in place and is expected to address this water body

condition.

Lines of Evidence:

Line of EvidenceRemedial Program in PlaceBeneficial UseR2 - Non-Contact Recreation

Schollar God 112 11011 Golflagt Neore

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

implementation plan. USEPA approved the TMDL on June 20, 2003. This

Water Segment: Calleguas Creek Reach 13 (Conejo Creek South Fork, was Conejo Cr Reach

4 and part of Reach 3 on 1998 303d list)

Pollutant: Excess Algal Growth

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

The original line of evidence supporting the listing does not identify a pollutant but rather, a condition caused by a pollutant(s) (algal growth). A TMDL was approved by RWQCB on October, 2002 and subsequently approved by USEPA on June, 2003 and this TMDL is expected to address this water body

condition.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303(d) Water Quality Limited Segment list because the segment

pollutant combinations is not a pollutant.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the pollutant is an ambient condition caused by

pollutant(s). A TMDL is in place and is expected to address this water body

condition.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use CO - Cold Freshwater Habitat, R2 - Non-Contact Recreation

Information Used to Assess

Water Quality:

A TMDL for this water segment-pollutant combination was approved by

the RWQCB in October 2002. The TMDL has an approved

implementation plan. USEPA approved the TMDL on June 20, 2003. This

Water Segment: Carbon Beach

Pollutant: Beach Closures

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under section 4 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. It is not known if the beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity

(section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303(d) Water Quality Limited Segment list because beach closures

are not pollutants.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because applicable beach closures are not a pollutant.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and

subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

approved by USEPA on June 19, 2003.

Water Segment: Coyote Creek

**Pollutant:** Abnormal Fish Histology (Lesions)

**Decision:** Delist

Weight of Evidence:

This water quality condition is being considered for delisting under sections 4.8 of the Listing Policy. A single line of evidence (3.8) documenting adverse biological response measured in resident individuals in water can be listed when these impacts are associated with specific pollutant concentrations.

Two lines of evidence are available in the administrative record to assess this condition, none of which associate these impacts with a pollutant. Based on numeric and descriptive data, it appears that fish below the Coyote Creek Waste Reclamation Plant outfall below Willow Street show evidence of tissue alteration, which is higher in prevalence and more severe than at other sites. Although evidence is accumulating indicating that metals and some organics interfere with the immune system of the resident organisms, the association has not yet been established. Therefore, at this time it is not possible to directly attribute this infectious process to toxicity or pollutant concentrations.

The weight of evidence indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category. Although, adverse biological responses have been documented these impacts have not been associated with toxicity or pollutant concentrations.

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Observations indicated some impacts but there is nothing in the administrative record associating these impacts to toxicity or pollutant concentrations.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

# SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because the biological impacts documented were not associated with toxicity or pollutant concentrations.

#### Lines of Evidence:

Numeric Line of Evidence

Adverse Biological Responses

Beneficial Use:

WA - Warm Freshwater Habitat

Matrix:

-N/A

Water Quality Objective/ Water Quality Criterion: Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological response in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board.

Evaluation Guideline:

With a thorough prior knowledge of normal fish anatomy, the investigators used histological analysis to detect alterations in tissues and organs caused by exposure to toxicants. When the concentration of a toxicant is sufficient to result only in cellular injury, but not in death of the cells, sublethal (adaptive) changes may be observed in affected cells.

A combination of the necropsy-based approach and the histological condition index was used in this study. Alterations from the expected normal gross anatomy and microscopic anatomy of resident fishes, fathead minnow (Pimephales promelas), goldfish (Cyprinus carpio), white croaker (Genyonemus lineatus) mosquito fish (Gambusia aflnis), and tilapia (Tilapia sp.) were included in the investigation. Lesions were compared to reference populations.

Data Used to Assess Water Quality:

Coyote Creek Above Outfall at Willow Street (LACSD, 2004b):

Fish collected at this site included 19 Tilapia (Tilapia sp.) and 3 Gambusia affinis.

Optical nerve damage was observed in these fish. A 5% frequency of gill parasitism was observed.

Inflammation of the gill and adjacent bronchial cavity wall was seen at 27% incidence. Within livers, 3 of the 22 individuals showed inflammation and necrosis (a 14% frequency).

Coyote Creek Below the Outfall (LACSP, 2004b):

Fifteen Tilapia fish were collected from this site. When the head region of one of these fish was sectioned in a parasagittal plane, various organs could be identified and analyzed. Inflammation of the eye was observed in one fish. However, the same type of inflammation much more frequently observed in nerve tissue (73% frequency). In the gill, no parasites were observed. However, necrosis of certain types of cells was seen with a 33% frequency. The livers of these fish were free of alterations. In addition, there were no adhesions, granuloma, or other inflammation. Degeneration of kidney cells was seen at high frequency (60%).

Spatial Representation:

Fish were collected from four sites in the lower San Gabriel River watershed. The sites included Coyote Creek above and below the Long Beach wastewater treatment plant outfall, the San Gabriel River at the

confluence of Coyote Creek, and from the tidal prism at College Park

Drive.

Temporal Representation: Samples were collected between 1992 and 1993.

Data Quality Assessment: Quality Assurance and methods well described in the report: "Toxicity

study of the Santa Clara, San Gabriel River, and Calleguas Creek"

(Bailey et al., 1996, in LACSD, 2004b).

#### Line of Evidence

Narrative Description Data Beneficial Use

Information Used to Assess Water Quality:

WA - Warm Freshwater Habitat

In the fish from the downstream site of Coyote Creek below the outfall, a higher percentage showed inflammation of the trigeminal nerve. Also, necrosis of mitochondria-rich (chloride) cells and pavement epithelium of secondary lamellae were seen. Gills of fish from contaminated sites have been shown to contain various lesions and necrosis in the above cell types is a common finding. Also, kidney tubular epithelial cell degeneration was present at higher prevalence than at the upstream site. Taken together, it would appear that fish below the outfall show evidence of tissue alteration, which is higher in prevalence and more severe than at other sites. Clearly, these fish are not normal and would likely be susceptible to additional stress from deteriorating water quality.

Inflammatory foci of both eye and the fifth cranial or the trigeminal nerve were prominent findings in fish collected from Coyote Creek above the outfall at Willow Street. It would be impossible to directly attribute this infectious process to toxicity. However, evidence is accumulating which indicates that metals and some organics such as polychlorinated biphenyls interfere with the immune system of the host. With a compromise in the immune system, parasites and bacteria may establish infestation. It is possible that the infectious lesions of eye and trigeminal nerve reflect prior immunoincompetence. An additional finding was inflammation of the liver in penhepatic venous sites. This condition could have followed prior hepatocyte necrosis.

Even if the inflammation was not associated with contaminants, the fact that a sizeable fraction (25%) of the fish examined showed disease. indicates that the fish are compromised and would likely be endangered further by deterioration of water quality.

Data Used to Assess Water Quality:

This evaluation of data came from the report: "Toxicity study of the Santa Clara, San Gabriel River, and Calleguas Creek" (Bailey et al., 1996 in LACSD, 2004b).

Water Segment: Coyote Creek

Pollutant: Selenium

**Decision:** Delist

Weight of Evidence:

This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. Two applicable lines of evidence are available in the administrative record to assess this pollutant. Five samples exceed the total selenium CTR criterion for continuous concentration.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Five of 102 samples exceeded the total selenium CTR criterion for continuous concentration and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: CTR Selenium Criterion for Continuous Concentration in water for the protection of aquatic life is 5  $\mu$ g/L, expressed in the total recoverable form. The criterion is linked and applicable for the protection of aquatic

life Beneficial Uses.

Data Used to Assess Water

Quality:

Numeric data generated from 64 samples taken from 11/10/97 to 1/13/04 at one to two-week sampling interval. Four samples exceeded the total selenium continuous criterion concentration, which equals the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time without deleterious effects (LACDPW, 2004c).

Spatial Representation: Samples collected at one sampling site from during primarily the wet

season beginning from 11/10/97 through 1/13/04 at approximately one to

two week intervals.

Temporal Representation: Sixty-four samples taken during primarily the wet season from 11/10/97

to 1/13/04 at approximately one to two week intervals.

Environmental Conditions: Results are from samples taken from 1997 to 2004 by the LADPW.

Sampling was carried out at Spring Street station (S13) on Coyote Creek

during primarily wet season conditions.

Data Quality Assessment: Evaluation of Analytes and QA/QC Specifications for Monitoring Program

(Woodward-Clyde, 1996) Los Angeles County Department of Public

Works.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: CTR Selenium Criterion for Continuous Concentration in water for the protection of aquatic life is 5  $\mu$ g/L, expressed in the total recoverable form. The criterion is linked and applicable for the protection of aquatic

life Beneficial Uses.

Data Used to Assess Water

Quality:

Numeric data generated from a total of 38 samples taken at three different Los Angeles County Sanitation District sampling stations (sampling stations RA1, RA, R9E) between 8/3/95 and 5/11/04 at different sampling intervals. One sample in station RA1 taken 7/14/03 exceeded the total selenium continuous criterion concentration, which equals the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4days) without deleterious effects (LACSD. 2004b).

Spatial Representation: Three (3) sample sites sampled between 8/3/95 and 5/11/04 at different

sampling intervals.

Temporal Representation: Thirty-eight samples were taken at three sampling stations primarily

during the dry season between 8/3/95 to 5/11/04.

Environmental Conditions: Results are from samples taken from 1995 to 2004 by the LA County

Sanitation Districts. Data primarily reflects dry weather conditions.

Data Quality Assessment: Quality Assurance Document Of The County Sanitation Districts Of Los

Angeles County. July 2003.

Water Segment: Dockweiler Beach

Pollutant: Beach Closures

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

The original line of evidence supporting the listing does not identify a pollutant but rather, a condition caused by a pollutant(s) (algal growth). A dry weather TMDL was approved by the RWQCB on 1/24/02, and a wet weather TMDL was approved on 12/12/02, and subsequently approved by USEPA on 6/19/03. These TMDLs are expected to address this water body condition.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303(d) Water Quality Limited Segment list because beach closures are not pollutants.

Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity (section 2 of the Listing Policy).

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable beach closures are not a pollutant.

**Lines of Evidence:** 

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

approved by USEPA on June 19, 2003.

Water Segment: Dominguez Channel Estuary (unlined portion below Vermont Ave)

**Pollutant:** Polycyclic Aromatic Hydrocarbons (PAHs)

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.9 of the Listing Policy. Under section 4.9 two lines of evidence

are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. In four new individual fact sheets, independently recommended for placement on the 303(d) list under section 3.9 of the Listing Policy, a sufficient number of samples exceeded the sediment quality guideline for the following PAHs: Pyrene, Phenanthrene, Chrysene, and Benzo (a) pyrene. Although sediment toxicity has been observed, significant benthic degradation has been recorded and this may be linked with these specific PAH pollutant

concentrations in this water body segment.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing the PAH sediment-pollutant combination and replacing this general PAH listing with the individually listings of Pyrene, Phenanthrene, Chrysene, and Benzo (a) pyrene on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

- 1. In the new available data a sufficient number of samples exceeded the specific PAH sediment quality guideline for each PAH. The benthic community impacts may be better linked with the effects of these individual pollutants in the sediment of this water body segment.
- 2. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met due to other PAHs.

# SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list for PAH in sediment and replace this general PAH listing with the individually listings of Pyrene, Phenanthrene, Chrysene, and Benzo (a) pyrene on the section 303(d) list in the Water Quality Limited Segments category. New individual lines of evidence, independently recommended for placement on the 303(d) list under section 3.9 of the Listing Policy, exhibit a sufficient number of samples exceeded the sediment quality guideline for the following PAHs: Pyrene, Phenanthrene, Chrysene, and Benzo (a) pyrene. The significant benthic degradation recorded may be better linked with these specific PAH pollutant concentrations in this water body segment.

#### **Lines of Evidence:**

Line of Evidence Adverse Biological Responses

Beneficial Use ES - Estuarine Habitat

Non-Numeric Objective: Surface waters shall not contain concentrations of chemical constituents

in amounts that adversely affect any designated beneficial use.

Data Used to Assess Water

Quality:

This water body pollutant combination is listed on the 2002 section 303(d) list for PAH in sediment. New data sets are now available recommending the listing of the following specific PAHs, Pyrene, Phenanthrene, Chrysene, and Benzo(a)pyrene. The present 303(d) listing for PAH in sediment should therefore be replaced with the specific listings of these PAHs.

Water Segment: Escondido Beach

Pollutant: Beach Closures

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under section 4 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. It is not known if the beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity

(section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303(d) Water Quality Limited Segment list because beach closures

are not pollutants.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because applicable beach closures are not a pollutant.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry

Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Flat Rock Point Beach Area

Pollutant: Beach Closures

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under section 4 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. It is not known if the beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity

(section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303(d) Water Quality Limited Segment list because beach closures

are not pollutants.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because applicable beach closures are not a pollutant.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and

subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Inspiration Point Beach

Pollutant: Beach Closures

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under section 4 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. It is not known if the beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity

(section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303(d) Water Quality Limited Segment list because beach closures

are not pollutants.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because applicable beach closures are not a pollutant.

Lines of Evidence:

**Line of Evidence** Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and

subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: La Costa Beach

Pollutant: Beach Closures

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under section 4 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. It is not known if the beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity

(section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303(d) Water Quality Limited Segment list because beach closures

are not pollutants.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because applicable beach closures are not a pollutant.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet

Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Las Tunas Beach

Pollutant: Beach Closures

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under section 4 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. It is not known if the beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity

(section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303(d) Water Quality Limited Segment list because beach closures

are not pollutants.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because applicable beach closures are not a pollutant.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and

subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Los Angeles Harbor - Consolidated Slip

Pollutant: Nickel

Decision: Delist

Weight of Evidence:

This water body-pollutant combination was originally placed on the 2002-303(d) list in error. BPTCP data was used as the basis for determining whether the water body combination would be placed on the 303(d) list. However, nickel is not identified in the Consolidated Toxic Hot Spots Cleanup Plan as a chemical contributing to the creation or maintenance of the toxic hot spot within this water body because there is no available sediment quality guideline that meets the requirements of section 6.1.3 of the Listing Policy.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. No guideline is available to evaluate this data.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

#### **Lines of Evidence:**

Numeric Line of EvidencePollutant-SedimentBeneficial Use:MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial

use (LARWQCB, 1995)

Evaluation Guideline: There is no available sediment quality guideline that meets the

requirements of section 6.1.3 of the Listing Policy.

Data Used to Assess Water

Quality:

A total of 26 samples are available. BPTCP sediment samples ranging in concentration from 23 ppm to 53.6 ppm. Nickel is not identified in the Consolidated Toxic Hot Spots Cleanup Plan as a chemical contributing to the creation or maintenance of the toxic hot spot (LARWQCB and CCC,

2004).

Spatial Representation: Samples were collected throughout water body. Samples collected from 1992 through 1997. Temporal Representation:

BPTCP Quality Assurance Project Plan (Stephenson et al., 1994) Contaminated Sediments Task Force Database. Data Quality Assessment:

Water Segment: Los Angeles Harbor - Consolidated Slip

**Pollutant:** Polycyclic Aromatic Hydrocarbons (PAHs)

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under sections 4.6 of the Listing

Policy. Under section 4.6 two lines of evidence are necessary to assess listing

status.

Three lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, there is known significant toxicity and bioassessment data associated with this water body segment but the number of pollutant sediment exceedances does not exceed the frequency allowed by the Listing Policy.

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

This conclusion is based on the staff findings that:

- 1. The sediment quality guideline used complies, with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. One of 41 samples taken between 1992 and 1997 exceeded the 1,800 μg/g Effects Range Medium sediment guideline. Further sampling in 2002, recorded no exceedances out of 120 samples. Although significant toxicity data and benthic community impacts are associated with this water body segment, pollutant sediment concentrations does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

# SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Basin Plan: Surface waters shall not contain concentrations of chemical Water Quality Criterion:

constituents in amounts that adversely affect any designated beneficial

Evaluation Guideline: A sediment quality quideline of 1,800 µg/g was used (Fairey et al., 2001).

Data Used to Assess Water

Quality:

Of the 120 core and grab samples from 2002, none exceed the guideline. For the 41 samples collected between 1992 and 1997, one exceed the

sediment guideline (LARWQCB and CCC, 2004).

Spatial Representation: The samples were collected throughout the water body. Temporal Representation: The samples were collected between 1992 and 1997.

Data Quality Assessment: Bay Protection and Toxic Clean up Program.

Contaminated Sediments Task Force Database.

Numeric Line of Evidence **Toxicity** 

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:

Basin Plan (LARWQCB, 1995): Existing habitats and associated populations of wetlands fauna and flora shall be maintained by -Maintaining substrate characteristics necessary to support flora and

fauna which would be present naturally, -Protecting food supplies for fish and wildlife, -Protecting reproductive and nursery areas, and

-Protecting wildlife corridors.

Evaluation Guideline: Significant toxicity as compared to control conditions.

Data Used to Assess Water

Quality:

Thirteen of 17 samples were significantly toxic (Anderson et al., 1998).

Samples were collected throughout the estuary. Spatial Representation:

Samples were collected in 1994 and 1996. Temporal Representation:

BPTCP Quality Assurance Project Plan (Stephenson et al., 1994). Data Quality Assessment:

Population/Community Degradation Numeric Line of Evidence

Beneficial Use: MA - Marine Habitat

Sediment Matrix:

Water Quality Objective/ Water Quality Criterion:

Basin Plan (LARWQCB, 1995): Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:

-Maintaining substrate characteristics necessary to support flora and

fauna which would be present naturally,

-Protecting food supplies for fish and wildlife, -Protecting reproductive and nursery areas, and

-Protecting wildlife corridors.

Basin Plan (LARWQCB, 1995): Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect

any designated beneficial use.

Evaluation Guideline: Evaluation of the benthic data were completed using the approaches

developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the

benthic community (Anderson et al., 1998).

Data Used to Assess Water

Quality:

Eleven samples are available with 5 exhibiting degraded conditions and 6

with transitional community characteristics (Anderson et al., 1998).

Spatial Representation: The samples were collected throughout the water body.

Temporal Representation: Samples were collected in 1992 and 1996.

Data Quality Assessment: BPTCP Quality Assurance Project Plan (Stephenson et al., 1994).

Los Angeles River Reach 1 (Estuary to Carson Street) **Water Segment:** 

Cadmium Pollutant:

Delist Decision:

This pollutant is being considered for removal from the section 303(d) list Weight of Evidence: under section 4.1 of the Listing Policy. Under section 4.1 a single line of

evidence is necessary to assess delisting status.

Two lines of evidence are available in the administrative record to assess this pollutant. The CTR criterion for cadmium for the protection of aquatic life was exceeded from data collected between 1996 and 2002 and no samples exceeded CCR Title 22 MCL guidelines for the protection of MUN beneficial uses in data collected between 2000 and 2003.

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Three of 42 samples exceeded the CTR CMC acute criterion, and CCC chronic criterion and zero of 22 samples exceeded CCR Title 22 MCL guidelines this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

# SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic, WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

Primary MCL guideline for Cadmium of .005 mg/L shall not be exceeded

to protect MUN beneficial uses in accordance with Title 22 of the California Code of regulation table 64431-A of section 64449.

Data Used to Assess Water

Quality:

No sample exceeded the Primary MCL guideline for Cadmium

(LACDPW, 2003a).

Spatial Representation: One sample site.

Temporal Representation: Twenty-two samples where taken during the wet and dry season from

> 10/12/00 to 4/30/03 at approximately one to two week intervals as part of the Los Angeles County Storm water monitoring program prepared by

the Los Angeles County Department of Public Works.

**Environmental Conditions:** The Los Angeles River Monitoring Station is located at the existing

> stream gage station (Stream Gage No. F319-R) between Willow Street and Wardlow Road in the City of Long Beach. At this location, which was chosen to avoid tidal influences, the total upstream tributary drainage area for the Los Angeles River is 825 square miles. This river is the largest watershed outlet to the Pacific Ocean in Los Angeles County. At

the site, the river is a concrete lined trapezoidal channel.

Evaluation of Analytes and QA/QC Specifications for Monitoring Program Data Quality Assessment:

(Woodward-Clyde, 1996) Los Angeles County Department of Public

Works.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic, WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

California Toxic Rule: The criterion for cadmium at 100 mg/L hardness is

2.24 µg/L.

Data Used to Assess Water

Quality:

Forty-two samples with three exceeding the water quality criterion

(LACDPW, 2003a).

Spatial Representation: One station (Wardlow gage) sampled during approximately 5 storm

events.

Temporal Representation: Samples collected between 1996 and 2002.

Environmental Conditions: Data are representative of wet-weather conditions.

Data Quality Assessment: NPDES MS4 monitoring conducted by Los Angeles County Department

of Public Works.

Line of Evidence Remedial Program in Place

Beneficial Use MU - Municipal & Domestic, WA - Warm Freshwater Habitat

Data Used to Assess Water

Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Metals/Toxics

TMDL was approved by the RWQCB in 2005 and subsequently approved

by USEPA in 2005.

Water Segment: Los Angeles River Reach 2 (Carson to Figueroa Street)

Pollutant: Scum/Foam-unnatural

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this water body condition. A nitrogen TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the nitrogen standard. Qualitative information on scum/foam-unnatural alone is not sufficient to support placement on the section 303(d) list (Listing Policy section 3.7). It is expected that this TMDL will address the

pollutant(s) contributing to or causing these conditions.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the pollutant is an ambient condition caused by

pollutant(s). A TMDL is in place and is expected to address this water body

condition.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently

approved by USEPA on March 18, 2004. This TMDL will address this

water body condition.

Water Segment: Lunada Bay Beach

Pollutant: Beach Closures

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under section 4 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. It is not known if the beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because is not a pollutant or toxicity

(section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303(d) Water Quality Limited Segment list because beach closures

are not pollutants.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because applicable beach closures are not a pollutant.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and

subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Malibu Lagoon Beach (Surfrider)

Pollutant: Beach Closures

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under section 4 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. It is not known if the beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity

(section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing

from the 303(d) list because beach closures are not pollutants.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because applicable beach closures are not a pollutant.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWOCB on January 24, 2002 and

Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and

Water Segment: Ormond Beach

Pollutant: Indicator Bacteria

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.2 of the Listing Policy. Under section 4.2 a single line of evidence is necessary to assess delisting status. Three lines of evidence are

available in the administrative record to assess this pollutant.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Thirty-three out of 279 samples exceeded the bacteriological Standard and this does not exceed the allowable frequency of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

# **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: 17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports

areas shall be as follows:

(1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed:

(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or

(B) 10,000 total coliform bacteria per 100 milliliters; or (C) 400 fecal coliform bacteria per 100 milliliters; or (D) 104 enterococcus bacteria per 100 milliliters.

Data Used to Assess Water Quality:

Eighty-four samples, 2 samples exceeding (SWRCB, 2003).

Spatial Representation: One station: VC(44000). This station represents the beach 50 yards on

either side of the sampling point. Samples were collected at Arnold Road.

Temporal Representation: Data collected in 1999, 2000, and 2001.

Data Quality Assessment: County Health Department.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: 17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports

areas shall be as follows:

(1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area

shall not exceed:

(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total

coliform bacteria exceeds 0.1; or

(B) 10,000 total coliform bacteria per 100 milliliters; or (C) 400 fecal coliform bacteria per 100 milliliters; or (D) 104 enterococcus bacteria per 100 milliliters.

Data Used to Assess Water Quality:

Ninety-nine samples, 13 samples exceeding (SWRCB, 2003).

Spatial Representation:

One station: VC(42000). This station represents the beach 50 yards on either side of the sampling point. Samples were collected 50 yards south

of the J Street drain.

Temporal Representation: Data collected in 1999, 2000, and 2001.

Data Quality Assessment: County Health Department.

Numeric Line of Evidence

Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: 17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports

areas shall be as follows:

(1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area

shall not exceed:

(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total

coliform bacteria exceeds 0.1; or

(B) 10,000 total coliform bacteria per 100 milliliters; or (C) 400 fecal coliform bacteria per 100 milliliters; or

(D) 104 enterococcus bacteria per 100 milliliters.

Data Used to Assess Water Quality:

Ninety-six samples, 18 samples exceeding (SWRCB, 2003).

Spatial Representation:

One station: VC(43000). This station represents the beach 50 yards on either side of the sampling point. Samples were collected 50 yards north

of the Oxnard Industrial drain.

Temporal Representation: Data collected in 1999, 2000, and 2001.

Data Quality Assessment: County Health Department.

Water Segment: Point Dume Beach

Pollutant: Beach Closures

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under section 4 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. It is not known if the beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity

(section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing

from the 303(d) list because beach closures are not pollutants.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because applicable beach closures are not a pollutant.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry

Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Point Vicente Beach

Pollutant: Beach Closures

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under section 4 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. It is not known if the beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity

(section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing

from the 303(d) list because beach closures are not pollutants.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because applicable beach closures are not a pollutant.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry

Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Resort Point Beach

Pollutant: Beach Closures

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under section 4 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. It is not known if the beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity

(section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing

from the 303(d) list because beach closures are not pollutants.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because applicable beach closures are not a pollutant.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and

subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Rocky Point Beach

Pollutant: Beach Closures

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under section 4 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. It is not known if the beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity

(section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing

from the 303(d) list because beach closures are not pollutants.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should not be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because beach closures are not pollutants and it is uncertain if the closures

are backed by data showing exceedances of water quality standards.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and

Water Segment: San Buenaventura Beach

Pollutant: Indicator Bacteria

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.2 of the Listing Policy. Under section 4.2 a single line of

evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. A total of 44 samples from three sampling stations from all four lines of evidence exceeded the bacteriological standard.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. Forty-four of 401 samples taken at three sampling stations exceeded the bacteriological standard and this does not exceed the allowable frequency of the Listing Policy.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: 17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports areas shall be as follows:

(1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed:

(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1: or

(B) 10,000 total coliform bacteria per 100 milliliters; or

(C) 400 fecal coliform bacteria per 100 milliliters; or (D) 104 enterococcus bacteria per 100 milliliters.

Data Used to Assess Water

Quality:

Ninety-seven samples, 2 samples exceeding (SWRCB, 2003).

Spatial Representation: One station: VC(20000). This station represents the beach 50 yards on

either side of the sampling point. Samples were collected south of drain

at Weymouth.

Temporal Representation: Data collected in 1999, 2000, and 2001.

Data Quality Assessment: County Health Department.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation

Matrix: -N/A

Water Quality Objective/ Water Quality Criterion: 17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports areas shall be as follows:

(1) Based on a single sample, the density of bacteria in water from each

sampling station at a public beach or public water contact sports area shall not exceed:

(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total

coliform bacteria exceeds 0.1; or

(B) 10,000 total coliform bacteria per 100 milliliters; or (C) 400 fecal coliform bacteria per 100 milliliters; or (D) 104 enterococcus bacteria per 100 milliliters.

Data Used to Assess Water

Quality:

One-hundred and three samples, 20 samples exceeding (SWRCB,

2003).

Spatial Representation: One station: VC(19000). This station represents the beach 50 yards on

either side of the sampling point. Samples were collected south of the

drain at San Jon Road.

Temporal Representation: Data collected in 1999, 2000, and 2001.

Data Quality Assessment: Samples were collected by the County Health Department.

**Numeric Line of Evidence** Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: 17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports

areas shall be as follows:

(1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area

shall not exceed:

(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total  $\,$ 

coliform bacteria exceeds 0.1; or

(B) 10,000 total coliform bacteria per 100 milliliters; or (C) 400 fecal coliform bacteria per 100 milliliters; or (D) 104 enterococcus bacteria per 100 milliliters.

Data Used to Assess Water

Quality:

One-hundred samples, 8 samples exceeding (SWRCB, 2003).

Spatial Representation: One station: VC(20000). This station represents the beach 50 yards on

either side of the sampling point. Samples were collected south of drain

at Dover Lane.

Temporal Representation: Data collected in 1999, 2000, and 2001.

Data Quality Assessment: County Health Department.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: 17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports

areas shall be as follows:

(1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area

shall not exceed:

(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total

coliform bacteria exceeds 0.1; or

(B) 10,000 total coliform bacteria per 100 milliliters; or (C) 400 fecal coliform bacteria per 100 milliliters; or (D) 104 enterococcus bacteria per 100 milliliters.

Data Used to Assess Water

Spatial Representation:

Quality:

One-hundred and one samples, 14 samples exceeding (SWRCB, 2003).

One station: VC(18000). This station represents the beach 50 yards on

either side of the sampling point. Samples were collected between

Kalorama Street and Sanjon testing sites.

Temporal Representation: Data collected in 1999, 2000, and 2001.

Data Quality Assessment: County Health Department.

Water Segment: San Gabriel River Estuary

**Pollutant:** Abnormal Fish Histology (Lesions)

**Decision:** Delist

Weight of Evidence:

This pollutant is being considered for delisting under sections 4.8 of the Listing Policy. Under section 4.8 delisting is appropriate when documented adverse biological responses are not associated with water or sediment numeric pollutant specific evaluation guidelines.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.8, adverse biological responses have been documented in fish taken from the site. Although a small portion of the fish collected exhibited impacts from toxicity, the majority of the fish samples collected from the San Gabriel River and its tributaries were victims of infectious disease. Therefore, there is insufficient information to conclude that the documented adverse biological responses are associated with specific pollutant(s).

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

This conclusion is based on the staff findings that:

- 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3. The majority of the fish collected showed adverse biological responses associated with infectious disease and not due to pollutant caused toxicity.
- 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

# SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence

Adverse Biological Responses

Beneficial Use:

WA - Warm Freshwater Habitat

Matrix:

Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological response in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board.

Evaluation Guideline:

With a thorough prior knowledge of normal fish anatomy, the investigators used histological analysis to detect alterations in tissues and organs caused by exposure to toxicants. When the concentration of a toxicant is sufficient to result only in cellular injury, but not in death of the cells, sublethal (adaptive) changes may be observed in affected cells.

A combination of the necropsy-based approach and the histological condition index was used in this study. Alterations from the expected normal gross anatomy and microscopic anatomy of resident fishes, fathead minnow (Pimephales promelas), goldfish (Cyprinus carpio), white croaker (Genyonemus lineatus) mosquito fish (Gambusia aflnis), and tilapia (Tilapia sp.) were included in the investigation. Lesions were compared to reference populations.

Data Used to Assess Water Quality:

San Gabriel River Tidal Prism at Confluence of Coyote Creek (LACSD, 2004):

A total of 21tilapia (Tilapia sp.) were collected at this site. Extensive inflammation of the trigeminal ganglion was observed with cells that had characteristics of eosinophilic granular leukocytes. The cells in question were associated with a swollen feature of the nerve indicating damage to the glial cells. The frequency of this abnormality was 33%. Gill necrosis was observed in 3 of the animals studied and this involved mitochondriarich (chloride) cells and pavement respiratory epithelium. The frequency for this lesion was 14%. Inflammation of gill arches and branchial cavity epithelium was observed in 2 of the individuals studied. The frequency of this alteration was 9%. Two of the individuals showed renal pathology. In one of these, extensive severe tubular epithelial hyalinization had occurred. This was associated with disruption of the nephron wall at that site. In another individual, interstitial inflammation was observed. Skin necrosis was found in 2 of the 21 animals observed. One gut parasite was found and appeared to be a tapeworm.

San Gabriel River Tidal Prism at College Park Drive (LACSD, 2004b):

A total of 30 tilapia (Tilapia sp.) and 1 white croaker (Genyonemus lineatus) were examined h m this site. Histopathologic examination revealed severe inflammation in submucosa and circular muscularis of the stomach. The inflammatory cells were eosinophilic granular leukocytes or macrophages which contained eosinophilic granules. In

addition to this change, the white croaker showed mild inflammation around bile structures in the liver and inflammatory response in the wall of the heart. In addition, macrophage aggregates were present in the liver at a frequency of 3 per 10 X field. The white croaker also showed mild inflammation of the gill and two flukes (parasitic trematodes) were attached to gill structures. In the 30 tilapia, fairly consistent involvement of the eosinophilic granular leukocytes in inflammatory foci around the trigeminal ganglion and branches of the trigeminal nerve were seen. The frequency of this lesion was 30%. In addition to the changes within the 5th cranial nerve, alterations were seen in gills that indicated that 3 of the 30 individuals showed aneurysm formation in blood vessels of secondary larnellae. In addition, inflammation of gill arch and filaments and adjacent regions of the branchial cavity wall were seen. The frequency for this lesion was 17%. Inflammation of the liver in areas adjacent to arterial structures and large tributaries of the hepatic venous system were seen. The inflammatory cells were usually eosinophilic granular leukocytes. The frequency for this change was 13%. Two of the fish showed inclusion bodies within hepatocytes. These were quite frequently seen and were close in resemblance to the tubular epithelium hyaline granules of the kidney. In addition, 4 fish showed interstitial inflammation of the kidney and 5 showed extensive degeneration with tubular epithelium showing hyaline change. The frequency for the latter was 17%. Some of the tubular degenerative changes had advanced to the formation of tubular deposits of calcium and this characterized 2 of the 30 individuals. Heart ventricular mineralization was also seen in 4 of the 30 individuals examined. Skin necrosis involved 2 of the 30 individuals and was a consistent change in the affected fish. A large skin lesion was observed on one tilapia. One fish showed a parasite within the gut lumen.

Spatial Representation:

Fish were collected from four sites in the lower San Gabriel River watershed. The sites included Coyote Creek above and below the Long Beach wastewater treatment plant outfall, the San Gabriel River at the confluence of Coyote Creek, and from the tidal prism at College Park Drive.

Temporal Representation:

Samples were collected between 1992 and 1993.

Data Quality Assessment:

Quality Assurance and methods well described in the report: "Toxicity study of the Santa Clara, San Gabriel River, and Calleguas Creek" (Bailey et al., 1996 in LACSD, 2004b).

Line of Evidence

Narrative Description Data

Beneficial Use

WA - Warm Freshwater Habitat

Information Used to Assess Water Quality:

Toxicity Identification Evaluations were completed and it was suggested that diazinon, chlorpyrifos, and ammonia were the cause of the toxicity. Studies of upstream and downstream sites in the San Gabriel River Tidal Prism revealed toxicity. Inflammatory lesions were prevalent at about 30% in fish from both sites. Gill toxicity reactions were seen at equal frequency. In the upper site, only two fish showed extensive tubular epithelial hyalinization of kidney while 5 of their counterparts from the lower site were positive for the same lesion. In addition, the lesions had advanced in the downstream affected fish to the point at which tubular deposits of calcium were prominent in two fish. Heart ventricle also showed mineralization, a likely sequel to systemic infection. Skin necrosis, likely a direct result of toxicity in the water column characterized

two of the 30 fish at the lower site.

The analysis of fish collected from the San Gabriel River and its tributaries suggests that a sizeable portion of the individuals are victims of infectious disease and a smaller portion reveal signs of toxicity. These are not healthy fish and their tissue conditions do not resemble those of fishes from reference habitats previously investigated by this group.

Data Used to Assess Water Quality:

This evaluation of data came from the report: "Toxicity study of the Santa Clara, San Gabriel River, and Calleguas Creek" (Bailey et al., 1996 in LACSD, 2004b).

Water Segment: San Gabriel River Reach 1 (Estuary to Firestone)

Pollutant: Abnormal Fish Histology (Lesions)

**Decision:** Delist

Weight of Evidence: This pollutant is being co

This pollutant is being considered for delisting under sections 4.8 of the Listing Policy. Under section 4.8 delisting is appropriate when documented adverse biological responses are not associated with water or sediment numeric

pollutant specific evaluation guidelines.

One line of evidence is available in the administrative record to assess this pollutant. Based on section 4.8, adverse biological responses have been documented in fish taken from the site. Although a small portion of the fish collected exhibited impacts from toxicity, the majority of the fish samples collected from the San Gabriel River and its tributaries were victims of infectious disease. Therefore there is insufficient information to conclude that the documented adverse biological responses are associated with specific pollutant(s).

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

This conclusion is based on the staff findings that:

- 1. The sediment quality guideline used complies, with the requirements of section 6.1.3 of the Policy.
- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. The majority of the fish collected showed adverse biological responses are associated with infectious disease and not due to pollutant caused toxicity.

  5. Pursuant to section 4.11 of the Listing Policy, no additional data and
- information are available indicating that standards are met

# SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because the documented adverse biological responses can not be associated with water or sediment numeric-specific evaluation guidelines.

#### Lines of Evidence:

Numeric Line of Evidence

Adverse Biological Responses

Beneficial Use:

WA - Warm Freshwater Habitat

Matrix:

Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological response in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board.

Evaluation Guideline:

With a prior knowledge of normal fish anatomy, the investigators used histological analysis to detect alterations in tissues and organs caused by exposure to toxicants. When the concentration of a toxicant is sufficient to result only in cellular injury, but not in death of the cells, sublethal (adaptive) changes may be observed in affected cells.

A combination of the necropsy-based approach and the histological condition index was used in this study. Alterations from the expected normal gross anatomy and microscopic anatomy of resident fishes, fathead minnow (Pimephales promelas), goldfish (Cyprinus carpio), white croaker (Genyonemus lineatus) mosquito fish (Gambusia aflnis), and tilapia (Tilapia sp.) were included in the investigation. Lesions were compared to reference populations.

Data Used to Assess Water Quality:

San Gabriel River Tidal Prism at Confluence of Coyote Creek (LACSD, 2004b).

A total of 21 tilapia (Tilapia sp.) were collected at this site. Extensive inflammation of nerve tissue was observed. The cells in question were associated with a swollen feature of the nerve indicating damage. The frequency of this abnormality was 33%. Gill necrosis was observed in 3 of the animals studied. The frequency for this lesion was 14%. Skin necrosis was found in 2 of the 21 animals observed. One gut parasite was found and appeared to be a tapeworm.

San Gabriel River Tidal Prism at College Park Drive (LACSD, 2004b).

A total of 30 tilapia (Tilapia sp.) and 1 white croaker (Genyonemus lineatus) were examined from this site. Histopathologic examination revealed severe inflammation in the stomach. The white croaker showed mild inflammation in the liver and inflammatory response in the wall of the heart. In the 30 tilapia, fairly consistent nerve inflammation were observed. The frequency of this lesion was 30%. Inflammation of the liver were also observed. The frequency for this change was 13%. A large skin lesion was observed on one tilapia. One fish showed a parasite within the gut.

Spatial Representation:

Fish were collected from four sites in the lower San Gabriel River watershed. The sites included Coyote Creek above and below the Long Beach wastewater treatment plant outfall, the San Gabriel River at the confluence of Coyote Creek, and from the tidal prism at College Park

Drive.

Temporal Representation: Samples were collected between 1992 and 1993.

Data Quality Assessment: Quality Assurance and methods well described in the report: "Toxicity

study of the Santa Clara, San Gabriel River, and Calleguas Creek"

(Bailey et al., 1996 in LACSD, 2004b).

Line of Evidence

Narrative Description Data

Beneficial Use

WA - Warm Freshwater Habitat

Information Used to Assess Water Quality:

Toxicity Identification Evaluations were completed and it was suggested that diazinon, chlorpyrifos, and ammonia were the cause of the toxicity. Studies of upstream and downstream sites in the San Gabriel River Tidal Prism revealed toxicity. Inflammatory lesions were prevalent at about 30% in fish from both sites. Gill toxicity reactions were seen at equal frequency. In the upper site, only two fish showed extensive tubular epithelial hyalinization of kidney while 5 of their counterparts from the lower site were positive for the same lesion. In addition, the lesions had advanced in the downstream affected fish to the point at which tubular deposits of calcium were prominent in two fish. Heart ventricle also showed mineralization, a likely sequel to systemic infection. Skin necrosis, likely a direct result of toxicity in the water column characterized

two of the 30 fish at the lower site.

The analysis of fish collected from the San Gabriel River and its tributaries suggests that a sizeable portion of the individuals are victims of infectious disease and a smaller portion reveal signs of toxicity. These are not healthy fish and their tissue conditions do not resemble those of fishes from reference habitats previously investigated by this group.

Data Used to Assess Water Quality:

This evaluation of data came from the report: "Toxicity study of the Santa Clara, San Gabriel River, and Calleguas Creek" (Bailey et al., 1996 in

LACSD, 2004b).

Water Segment: San Gabriel River Reach 1 (Estuary to Firestone)

Pollutant: Excess Algal Growth

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.7 of the Listing Policy. Under section 4.7 a single line of evidence is necessary to assess listing status. It is not known if the algae information is backed by pollutant data. Algae should not be placed on the section 303(d) list because it is not a pollutant or toxicity (section 2 of the

Listing Policy).

One line of evidence is available in the administrative record to assess this pollutant. Two of the samples were judged to exceed a subjective algae ranking guideline.

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

This conclusion is based on the staff findings that:

- 1. Two of 4 samples exceeded the Subjective algae guideline and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 2. Excess algae growth information should not be placed on the section 303(d) list because it is not a pollutant or toxicity (section 2 of the Listing Policy).
- 3. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

# SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because it cannot be determined if the guideline used was applicable and water quality standards were exceeded. Furthermore, excess algae growth information should not be placed on the section 303(d) list because algae is not a pollutant or toxicity (section 2 of the Listing Policy).

#### Lines of Evidence:

**Line of Evidence** Adverse Biological Responses

Beneficial Use R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat

Non-Numeric Objective: Basin Plan: Waters shall not contain biostimulatory substances in

concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.

Evaluation Guideline: The presence of algae in the water segment was used as the guideline.

The rankings were subjective and assigned to water bodies by one

person for consistency.

Data Used to Assess Water

Quality:

Four observations with 2 of the observations judged to be not supporting

beneficial uses (SWRCB, 2003).

Spatial Representation:

One sampling location.

Temporal Representation:

Observations made between 1992 and 1995. Samples taken in different

seasons and no greater than two time within one year.

Water Segment: San Gabriel River Reach 1 (Estuary to Firestone)

Pollutant: Toxicity

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under sections 4.6 of the Listing

Policy. Under section 4.6 a single line of evidence is necessary to assess

listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on section 4.6, the site does not have significant water

toxicity.

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

Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies, with the requirements of section 6.1.3 of the Policy.

- 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 4. None of the 46 samples exceeded the NOEC indicating that the receiving water was not toxic and these do not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
- 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

#### Lines of Evidence:

Numeric Line of Evidence Adverse Biological Responses

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

Basin plan narrative toxicity WQO.

Evaluation Guideline: No observed effect concentration (NOEC) is the highest tested

concentration of toxicant to which organisms are exposed in a full life-cycle or partial life-cycle (shot-term) test that causes no observable adverse effect on the test organisms. The guideline is used and

recommended to determine the highest concentration of toxicant at which the values of the observed responses are not statistically significantly different from the control.

Data Used to Assess Water

Quality:

Numeric toxicity results generated from a total of ten samples none of which were found to be toxic. This was a collaborative toxicity study conducted by the U.S. EPA and the Districts in August through October 2003. The study generated a total of 16 samples taken for Reach 1. Six (6) samples were taken in August 2003 (2 from R-3-1, 2 from R-4, and 2 from R-9W), 4 samples were taken in September 2003 (2 from R-3- 1, 2 from R-4, and 1 from R-9W) and 6 samples were taken in October 2003 (2 from R-3-1, 2 from R-4, and 2 from R-9W). The August 2003, sampling results (6 samples) were excluded from analysis due a short-term operational upset that occurred while sampling was being carried out in the San Jose Creek WRP located within Reach 1 (LACSD, 2004b).

Spatial Representation:

Three (3) sample sites sampled from 8/2003 through 10/2003 at a monthly interval. Station R-3-1 is located towards the upstream end of Reach 1, upstream of the Los Coyotes Water Reclamation Plant (WRP). Receiving water station R-4 is located downstream of the discharge of the Los Coyotes WRP. Receiving water station R-9W is located at the lower end of Reach 1, just upstream of the San Gabriel River Estuary. All sampling stations are all located in Reach 1 of the San Gabriel River.

Temporal Representation:

A total of 16 samples were taken, six (6) samples were taken in August 2003 (2 from R-3-1, 2 from R-4, and 2 from R-9W), 4 samples were taken in September 2003 (2 from R-3-1, 2 from R-4, and 1 from R-9W) and 6 samples were taken in October 2003 (2 from R-3-1, 2 from R-4, and 2 from R-9W).

Environmental Conditions:

Data is one year old. The August 2003, sampling results (6 samples) were excluded from analysis due a short-term operational upset that occurred while sampling was being carried out in the San Jose Creek WRP located within Reach 1.

Data Quality Assessment:

Evaluation of Analytes and QA/QC Specifications for Monitoring Program (Woodward-Clyde, 1996) Los Angeles County Department of Public Works.

Numeric Line of Evidence

Adverse Biological Responses
WA - Warm Freshwater Habitat

Matrix:

Beneficial Use:

Water

Water Quality Objective/ Water Quality Criterion: Narrative Toxicity Basin Plan WQO is applicable to the protection of aquatic life BUs.

Evaluation Guideline:

No observed effect concentration (NOEC) is the highest tested concentration of toxicant to which organisms are exposed in a full lifecycle or partial life-cycle (shot-term) test that causes no observable adverse effect on the test organisms. The guideline is used and recommended to determine the highest concentration of toxicant at which the values of the observed responses are not statistically significantly

different from the control.

Data Used to Assess Water Quality:

Numeric data generated from a total of 36 samples (12 samples per sampling stations) from Reach 1 stations R-1-3-1, R-9, and R-9 W respectively, taken from 6/2003 to 5/2004 on a monthly interval. No adverse effects (100 percent survival and growth) were observed in all

toxicity results from all three sampling stations (LACSD, 2004b).

Spatial Representation: Three (3) sample sites sampled from 6/2003 through 5/2004 at a monthly

interval. Station R-3-1 is located towards the upstream end of Reach 1, upstream of the Los Coyotes Water Reclamation Plant (WRP). Receiving water station R-4 is located downstream of the discharge of the Los Coyotes WRP. Receiving water station R-9W is located at the lower end of Reach 1, just upstream of the San Gabriel River Estuary. All sampling

stations are all located in Reach 1 of the San Gabriel River.

Temporal Representation: Thirty-six (36) samples where taken from 6/2003 through 5/2004 at a

monthly interval from three sampling stations within Reach 1 of the San

Gabriel River.

Environmental Conditions: The submitted toxicity results are from 2003-04. In June 2003, the LA

County Sanitation Districts completed conversion of water reclamation plants in the San Gabriel River watershed to nitrification/denitrification

(NDN) mode.

Data Quality Assessment: Evaluation of Analytes and QA/QC Specifications for Monitoring Program

(Woodward-Clyde, 1996) Los Angeles County Department of Public

Works.

Water Segment: San Jose Creek Reach 1 (SG Confluence to Temple St.)

Pollutant: Excess Algal Growth

**Decision:** Delist

Weight of Evidence: This condition is being considered for delisting under section 4.7 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. It is not known if the algae information is backed by pollutant data. Algae should not be placed on the section 303(d) list because it is not a

pollutant or toxicity (section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the Section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because it cannot be determined if the guideline used was applicable and water quality standards were exceeded. Furthermore, excess algae growth information should not be placed on the section 303(d) list because algae is not a pollutant or toxicity (section 2 of the Listing Policy).

Lines of Evidence:

Line of Evidence Adverse Biological Responses

Beneficial Use R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat

Non-Numeric Objective: Basin Plan: Waters shall not contain biostimulatory substances in

concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.

Evaluation Guideline: The presence of algae in the water segment was used as the guideline.

The rankings were subjective and assigned to water bodies by one

person for consistency.

Data Used to Assess Water

Quality:

Seven observations with 2 of the observations judged to be not

supporting beneficial uses (LACSD, 2004b).

Spatial Representation: One sampling location.

Temporal Representation: Observations made between 1990 and 1993. Samples taken in different

seasons with 4 observations in 1992.

Water Segment: San Jose Creek Reach 2 (Temple to I-10 at White Ave.)

Pollutant: Excess Algal Growth

**Decision:** Delist

Weight of Evidence: This condition is being considered for delisting under section 4.7 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. It is not known if the algae information is backed by pollutant data. Algae should not be placed on the section 303(d) list because it is not a

pollutant or toxicity (section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water

segment-pollutant combination from the Section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because it cannot be determined if the guideline used was applicable and water quality standards were exceeded. Furthermore, excess algae growth information should not be placed on the section 303(d) list because algae is not a pollutant or toxicity (section 2 of the Listing Policy).

Lines of Evidence:

Line of Evidence Adverse Biological Responses

Beneficial Use R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat

Non-Numeric Objective: Basin Plan: Waters shall not contain biostimulatory substances in

concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.

Evaluation Guideline: The presence of algae in the water segment was used as the guideline.

The rankings were subjective and assigned to water bodies by one

person for consistency.

Data Used to Assess Water

Quality:

Six observations with 2 of the observations judged to be partially not

supporting beneficial uses (LACSD, 2004b).

Spatial Representation: One sampling location. In 1996, San Jose Creek was defined as a single

segment. When the segment was split the listing was applied to both segments. There is no assessment in Reach 2 as currently defined.

Temporal Representation: Observations made between 1990 and 1993. Samples taken in different

seasons and 4 samples taken in 1992.

Water Segment: Sea Level Beach

Pollutant: Beach Closures

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under section 4 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. It is not known if the beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity

(section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing

from the 303(d) list because beach closures are not pollutants.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because applicable beach closures are not a pollutant.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and

subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Topanga Beach

Pollutant: Beach Closures

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

The original line of evidence supporting the listing does not identify a pollutant but rather, a condition caused by a pollutant(s) (beach closures). The dry weather TMDL was approved by the RWQCB on 1/24/02, and the wet weather TMDL was approved on 12/12/04, and subsequently approved by USEPA on 6/19/03. These TMDLs are expected to address this water body

condition.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing

from the 303(d) list because beach closures are not pollutants.

Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity (section 2 of the Listing Policy).

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the pollutant is an ambient condition caused by

pollutant(s). A TMDL is in place and is expected to address this water body

condition.

#### Lines of Evidence:

**Line of Evidence** Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Torrance Beach

Pollutant: Beach Closures

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

The original line of evidence supporting the listing does not identify a pollutant but rather, a condition caused by a pollutant(s) (beach closures). The dry weather TMDL was approved by the RWQCB on 1/24/02, and the wet weather TMDL was approved on 12/12/04, and subsequently approved by USEPA on 6/19/03. These TMDLs are expected to address this water body

condition.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing

from the 303(d) list because beach closures are not pollutants.

Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity (section 2 of the Listing Policy).

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the pollutant is an ambient condition caused by

pollutant(s). A TMDL is in place and is expected to address this water body

condition.

#### Lines of Evidence:

**Line of Evidence** Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Trancas Beach (Broad Beach)

Pollutant: Beach Closures

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

The original line of evidence supporting the listing does not identify a pollutant but rather, a condition caused by a pollutant(s) (beach closures). The dry weather TMDL was approved by the RWQCB on 1/24/02, and the wet weather TMDL was approved on 12/12/04, and subsequently approved by USEPA on 6/19/03. These TMDLs are expected to address this water body

condition.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing

from the 303(d) list because beach closures are not pollutants.

Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity (section 2 of the Listing Policy).

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the pollutant is an ambient condition caused by

pollutant(s). A TMDL is in place and is expected to address this water body

condition.

#### Lines of Evidence:

**Line of Evidence** Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

Water Segment: Tujunga Wash (LA River to Hansen Dam)

Pollutant: Scum/Foam-unnatural

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

The original line of evidence supporting the listing does not identify a pollutant but rather, a condition caused by a pollutant(s) (Scum/Foam). The TMDL was approved by the RWQCB on 8/19/03 and subsequently approved by USEPA on 31804 The TMDL is expected to address this water body condition.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this listing from the 303(d) Water Quality Limited Segment list because the segment pollutant combinations is not a pollutant.

Foam and scum information should not be placed on the section 303(d) list because they are not pollutants or toxicity (section 2 of the Listing Policy).

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because the pollutant is an ambient condition caused by

pollutant(s). A TMDL is in place and is expected to address this water body

condition.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004. This TMDL will address this

water body condition.

Water Segment: Tujunga Wash (LA River to Hansen Dam)

Pollutant: Taste and odor

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

The original line of evidence supporting the listing does not identify a pollutant but rather, a condition caused by a pollutant(s) (algal growth). A TMDL was approved by RWQCB in August, 2002 and subsequently approved by USEPA on March, 2003 and this TMDL is expected to address this water body

condition.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303 (d) Water Quality Limited Segment list because the segment

pollutant combinations is not a pollutant.

Taste and odor information should not be placed on the section 303(d) list because they are not pollutants or toxicity (section 2 of the Listing Policy).

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because the pollutant is an ambient condition caused by

pollutant(s). A TMDL is in place and is expected to address this water body

condition.

### **Lines of Evidence:**

Line of Evidence Remedial Program in Place

Beneficial Use R2 - Non-Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004. This TMDL will address this

water body condition.

Water Segment: Ventura River Estuary

Pollutant: Fecal Coliform

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list

under section 4.3 of the Listing Policy. Under section 4.3 a single line of

evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Six samples exceed the fecal coliform 400 MPN/100 ml single

sample limit water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water

 $segment-pollutant\ combination\ from\ the\ section\ 303(d)\ list.$ 

This conclusion is based on the staff findings that:

1.The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Six of 37 samples exceeded the fecal coliform water quality objective and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation:

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

exceeded.

#### Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation, SH - Shellfish Harvesting

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: In waters designated for water contact recreation (REC-1), the fecal coliform concentration shall not exceed a log mean of 200/100 ml (based on a minimum of not less than four samples for any 30-day period), nor shall more than 10 percent of total samples during any 30-

day period exceed 400/100 ml.

Data Used to Assess Water

Quality:

Thirty-seven bacteria samples. Six samples exceeding the 400 MPNM/100ml objective (Planetwater, various years); (SWRCB, 2003).

Spatial Representation: 1 site.

Temporal Representation: Different seasons and years.

Data Quality Assessment: Ojai Valley River Volunteer Monitoring Program Methods.

Water Segment: Verdugo Wash Reach 1 (LA River to Verdugo Rd.)

Pollutant: Excess Algal Growth

**Decision:** Delist

Weight of Evidence: This water quality condition is being considered for listing under section 2.2 of

the Listing Policy. Under this section of the Policy, a minimum of one line of

evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this water body condition. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Qualitative information on excess algal growth alone is not sufficient to support continued placement on the section 303(d) list (Listing

Policy section 3.7).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should not be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because algal growth is not a pollutant and it is uncertain if the growth listing

is backed by pollutant data showing exceedances of water quality standards.

#### **Lines of Evidence:**

Line of EvidenceRemedial Program in PlaceBeneficial UseR2 - Non-Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004. This TMDL will address this

water body condition.

Water Segment: Verdugo Wash Reach 2 (Above Verdugo Road)

Pollutant: Excess Algal Growth

**Decision:** Delist

Weight of Evidence: This water quality condition is being considered for listing under section 2.2 of

the Listing Policy. Under this section of the Policy, a minimum of one line of

evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this water body condition. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Qualitative information on excess algal growth alone is not sufficient to support continued placement on the section 303(d) list (Listing

Policy section 3.7).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination in the Water Quality Limited Segments Being

Addressed portion of the section 303(d) list.

SWRCB Staff Recommendation:

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should not be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list

because algal growth is not a pollutant and it is uncertain if the growth listing is backed by pollutant data showing exceedances of water quality standards.

#### **Lines of Evidence:**

Line of EvidenceRemedial Program in PlaceBeneficial UseR2 - Non-Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004. This TMDL will address this

water body condition.

Water Segment: Zuma Beach (Westward Beach)

Pollutant: Beach Closures

**Decision:** Delist

Weight of Evidence: This pollutant is being considered for delisting under section 4 of the Listing

Policy. Under this section of the Policy, a minimum of one line of evidence is

needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. It is not known if the beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity

(section 2 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing

from the 303(d) list because beach closures are not pollutants.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section

303(d) list because applicable beach closures are not a pollutant.

Lines of Evidence:

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry

Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2002 and

# Los Angeles Region (4)

# Area Change

Recommendations to change the area affected by pollutants on the section 303(d) List

Water Segment: Dominguez Channel (lined portion above Vermont Ave)

Pollutant:

**Decision:** Accept Area Change

Weight of Evidence: The data and information in the administrative record supports this

change in estimated size affected.

SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the estimated size affected should be changed as

presented.

Lines of Evidence:

Line of Evidence Narrative Description Data

Beneficial Use AG - Agricultural Supply

Information Used to Assess

Water Quality:

The water segments in the vicinity of the Los Angeles/Long Beach Harbor should be changed to better reflect the Basin Plan Water body naming scheme (Los Angeles RWQCB, 2004g). The water body names in the 2002 section 303(d) list are not reflective of the listings made in 1996 and leave some uncertainty about the boundaries of the areas covered by the listings. Also, from a hydrologic point of view, some water bodies were grouped together inappropriately. New maps have been included in the administrative record and all data reviews have used these new water segments.

Water Segment: Dominguez Channel Estuary (unlined portion below Vermont Ave)

Pollutant:

**Decision:** Accept Area Change

Weight of The data and information in the administrative record supports this

**Evidence:** change in estimated size affected.

SWRCB Staff

After review of the available data and information, SWRCB staff

**Recommendation:** concludes that the estimated size affected should be changed as

presented.

**Lines of Evidence:** 

Line of EvidenceNarrative Description DataBeneficial UseAG - Agricultural Supply

Information Used to Assess

Water Quality:

The water segments in the vicinity of the Los Angeles/Long Beach Harbor should be changed to better reflect the Basin Plan Water body naming scheme (Los Angeles RWQCB, 2004g). The water body names in the 2002 section 303(d) list are not reflective of the listings made in 1996 and leave some uncertainty about the boundaries of the areas covered by the listings. Also, from a hydrologic point of view, some water bodies were grouped together

inappropriately. New maps have been included in the administrative record and all data reviews have used these new water segments.

Los Angeles Harbor - Cabrillo Marina Water Segment:

Pollutant:

Decision: Accept Area Change

The data and information in the administrative record supports this Weight of

change in estimated size affected. Evidence:

SWRCB Staff

After review of the available data and information, SWRCB staff concludes that the estimated size affected should be changed as Recommendation:

presented.

Lines of Evidence:

Line of Evidence Narrative Description Data Beneficial Use AG - Agricultural Supply

Information Used to Assess

Water Quality:

The water segments in the vicinity of the Los Angeles/Long Beach Harbor should be changed to better reflect the Basin Plan Water body naming scheme (Los Angeles RWQCB, 2004g). The water body names in the 2002 section 303(d) list are not reflective of the listings made in 1996 and leave some uncertainty about the boundaries of the areas covered by the listings. Also, from a hydrologic point of view, some water bodies were grouped together

inappropriately. New maps have been included in the administrative record and all data reviews have used these new water segments.

Water Segment: Los Angeles Harbor - Consolidated Slip

Pollutant:

**Decision:** Accept Area Change

Weight of The data and information in the administrative record supports this

**Evidence:** change in estimated size affected.

**SWRCB Staff**Recommendation:

After review of the available data and information, SWRCB staff concludes that the estimated size affected should be changed as

presented.

Lines of Evidence:

Line of EvidenceNarrative Description DataBeneficial UseAG - Agricultural Supply

Information Used to Assess

Water Quality:

The water segments in the vicinity of the Los Angeles/Long Beach Harbor should be changed to better reflect the Basin Plan Water body naming scheme (Los Angeles RWQCB, 2004g). The water body names in the 2002 section 303(d) list are not reflective of the listings made in 1996 and leave some uncertainty about the boundaries of the areas covered by the listings. Also, from a hydrologic point of view, some water bodies were grouped together

inappropriately. New maps have been included in the administrative record and all data reviews have used these new water segments.

Water Segment: Los Angeles Harbor - Fish Harbor

Pollutant:

**Decision:** Accept Area Change

Weight of The data and information in the administrative record supports this

**Evidence:** change in estimated size affected.

SWRCB Staff

After review of the available data and information, SWRCB staff

**Recommendation:** concludes that the estimated size affected should be changed as

presented.

Lines of Evidence:

Line of Evidence Narrative Description Data

Beneficial Use AQ - Aquaculture

Information Used to Assess

Water Quality:

The water segments in the vicinity of the Los Angeles/Long Beach Harbor should be changed to better reflect the Basin Plan Water body naming scheme (Los Angeles RWQCB, 2004g). The water body names in the 2002 section 303(d) list are not reflective of the listings made in 1996 and leave some uncertainty about the boundaries of the areas covered by the listings. Also, from a hydrologic point of view, some water bodies were grouped together inappropriately. New maps have been included in the administrative

record and all data reviews have used these new water segments.

Water Segment: Los Angeles Harbor - Inner Cabrillo Beach Area

Pollutant:

**Decision:** Accept Area Change

Weight of The data and information in the administrative record supports this

**Evidence:** change in estimated size affected.

**SWRCB Staff**Recommendation:

After review of the available data and information, SWRCB staff concludes that the estimated size affected should be changed as

presented.

Lines of Evidence:

Line of EvidenceNarrative Description DataBeneficial UseAG - Agricultural Supply

Information Used to Assess

Water Quality:

The water segments in the vicinity of the Los Angeles/Long Beach Harbor should be changed to better reflect the Basin Plan Water body naming scheme (Los Angeles RWQCB, 2004g). The water body names in the 2002 section 303(d) list are not reflective of the listings made in 1996 and leave some uncertainty about the boundaries of the areas covered by the listings. Also, from a hydrologic point of view, some water bodies were grouped together inappropriately. New maps have been included in the administrative

record and all data reviews have used these new water segments.

Water Segment: Los Angeles/Long Beach Inner Harbor

Pollutant:

**Decision:** Accept Area Change

Weight of The data and information in the administrative record supports this

**Evidence:** change in estimated size affected.

**SWRCB Staff**Recommendation:

After review of the available data and information, SWRCB staff concludes that the estimated size affected should be changed as

presented.

Lines of Evidence:

Line of EvidenceNarrative Description DataBeneficial UseAG - Agricultural Supply

Information Used to Assess

Water Quality:

The water segments in the vicinity of the Los Angeles/Long Beach Harbor should be changed to better reflect the Basin Plan Water body naming scheme (Los Angeles RWQCB, 2004g). The water body names in the 2002 section 303(d) list are not reflective of the listings made in 1996 and leave some uncertainty about the boundaries of the areas covered by the listings. Also, from a hydrologic point of view, some water bodies were grouped together

inappropriately. New maps have been included in the administrative record and all data reviews have used these new water segments.

Water Segment: Los Angeles/Long Beach Outer Harbor (inside breakwater)

Pollutant:

**Decision:** Accept Area Change

Weight of The data and information in the administrative record supports this

**Evidence:** change in estimated size affected.

**SWRCB Staff**Recommendation:

After review of the available data and information, SWRCB staff concludes that the estimated size affected should be changed as

presented.

**Lines of Evidence:** 

Line of EvidenceNarrative Description DataBeneficial UseAG - Agricultural Supply

Information Used to Assess

Water Quality:

The water segments in the vicinity of the Los Angeles/Long Beach Harbor should be changed to better reflect the Basin Plan Water body naming scheme (Los Angeles RWQCB, 2004g). The water body names in the 2002 section 303(d) list are not reflective of the listings made in 1996 and leave some uncertainty about the boundaries of the areas covered by the listings. Also, from a hydrologic point of view, some water bodies were grouped together inappropriately. New maps have been included in the administrative

record and all data reviews have used these new water segments.

Water Segment: San Pedro Bay Near/Off Shore Zones

Pollutant:

**Decision:** Accept Area Change

Weight of The data and information in the administrative record supports this

**Evidence:** change in estimated size affected.

**SWRCB Staff**Recommendation:

After review of the available data and information, SWRCB staff concludes that the estimated size affected should be changed as

presented.

Lines of Evidence:

Line of EvidenceNarrative Description DataBeneficial UseIN - Industrial Service Supply

Information Used to Assess

Water Quality:

The water segments in the vicinity of the Los Angeles/Long Beach Harbor should be changed to better reflect the Basin Plan Water body naming scheme (Los Angeles RWQCB, 2004g). The water body names in the 2002 section 303(d) list are not reflective of the listings made in 1996 and leave some uncertainty about the boundaries of the areas covered by the listings. Also, from a hydrologic point of view, some water bodies were grouped together inappropriately. New maps have been included in the administrative

record and all data reviews have used these new water segments.

Page left blank intentionally