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



September 2005

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San Diego Region (9)



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

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Matrix:

Water Segment:	Agua Hedionda Creek
Pollutant:	Manganese
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 Title 22 Secondary Drinking Water MCLs of 0.05 mg/l for Manganese.
	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 MCL secondary drinking water standard 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, IN - Industrial Service Supply, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Water Quality Objective/ The water quality objective for manganese in Agua Hedionda Creek is 0.05 Water Quality Criterion: milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water

Quality Objectives. This concentration is not be exceeded more than 10% of the

time during any one year period

Data Used to Assess Water

Quality:

Two of 4 samples exceeded the water quality standard (SWAMP, 2004).

Spatial Representation: Samples taken at one station in Agua Hedionda Creek No. 33.14887 -117.29758.

Temporal Representation: Samples were collected from March through September of 2002.

Environmental Conditions: Agua Hedionda Creek, Part of the San Diego Coastal Streams: Hydrologic Unit

Basin Number 4.32

Data Quality Assessment: SWAMP Quality Assurance Plan

Matrix:

Water Segment: Agua Hedionda Creek Selenium **Pollutant: Decision:** List This pollutant is being considered for placement on the section 303(d) list under Weight of Evidence: 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 Continuous Concentration for selenium of 5 ug/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. Three of 4 samples exceeded the CTR CCC 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. After review of the available data and information, SWRCB staff concludes that the **SWRCB Staff** water body-pollutant combination should be placed on the section 303(d) list because **Recommendation:** applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. **Lines of Evidence:** Numeric Line of Evidence Pollutant-Water IN - Industrial Service Supply, MU - Municipal & Domestic, R1 - Water Beneficial Use: Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Water Quality Objective/ Water Quality Criterion: CTR Freshwater Chronic (CCC) 5 ug/L.

Data Used to Assess Water

Quality:

Four water samples, three samples exceeding The CTR criteria (SWAMP,

2004).

Spatial Representation: Samples were taken at one station in Agua Hedionda Creek

No. 33.14887 -117.29758.

Temporal Representation: Samples were collected from March through September of 2002.

Environmental Conditions: Agua Hedionda Creek, Part of the San Diego Coastal Streams: Hydrologic Unit

Basin Number 4.31

Data Quality Assessment: SWAMP Quality Assurance Plan.

Matrix:

Water Segment: Agua Hedionda Creek Sulfates **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 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 8 samples exceeded the Water Quality Control Plan WQO Title 22 Table 64449-B Secondary Maximum Contaminant Levels for sulfate 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. After review of the available data and information, SWRCB staff concludes that the **SWRCB Staff** water body-pollutant combination should be placed on the section 303(d) list because **Recommendation:** applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. **Lines of Evidence:** Pollutant-Water Numeric Line of Evidence AG - Agricultural Supply, IN - Industrial Service Supply, MU - Municipal & Beneficial Use: Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA -Warm Freshwater Habitat, WI - Wildlife Habitat

Water Quality Objective/ Water Quality Control Plan WQO from Title 22 Table 64449-B Secondary Water Quality Criterion:

Maximum Contaminant Levels of 250 mg/l not to be exceeded ten percent of the

time during one year period.

Data Used to Assess Water

Quality:

Eight of 8 samples exceeded the basin plan objective (SWAMP, 2004).

Spatial Representation: Samples taken from one sample site at Agua Hedionda Creek station

No:33.14887 -117.29758

Temporal Representation: Samples were collected from March through September of 2002.

Data Quality Assessment: SWAMP Quality Assurance Plan.

Water Segment: Barrett Lake

Pollutant: Color

Decision: List

Weight of Evidence: Base

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 20 samples exceeded the Basin Plan criteria, and these exceed 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-Nuisance

Beneficial Use: AG - Agricultural Supply, CO - Cold Freshwater Habitat, FR - Freshwater

Replenishment, IN - Industrial Service Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, 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: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WOO for color is 15 units.

Data were collected by the City of San Diego Water Dept from 1996 to 2000. Nine of the 20 samples were in exceedance and 4 of 20 samples measured color Data Used to Assess Water

levels at 15 color units (SWRCB, 2003).

Spatial Representation: Samples were collected at Barrett Reservoir station BAA-0.

Temporal Representation: Samples were collected on a quarterly basis from 03/1996 to 12/2000.

QA/QC Equivalent: Data used in 2002 assessment.

Quality:

Water Segment: Barrett Lake

Pollutant: Manganese

Decision: List

Weight of Evidence: 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 19 individual samples exceeded the Basin Plan criteria and the criteria was exceeded more than 10% of the time during the years 1996, 1997, 1998 and 1999. 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: AG - Agricultural Supply, CO - Cold Freshwater Habitat, FR - Freshwater

Replenishment, IN - Industrial Service Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, 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 water quality objective for manganese in Barrett Lake is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not be exceeded more than 10% of the

time during any one year period.

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Seven of 19 samples exceeded 0.05 mg/L. This concentration was exceeded more than 10% of the time during the years 1996, 1997, 1998 and 1999

(SWRCB, 2003).

Spatial Representation: Samples were collected at Barrett Reservoir site BAA-0.

Temporal Representation: Samples were collected on a quarterly basis from 01/1996 to 09/2000.

QA/QC Equivalent: Data used in 2002 assessment.

Water Segment: Barrett Lake

Pollutant: pH (high)

Decision: List

Weight of Evidence: 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 20 samples exceeded the Basin Plan objective, and these exceed 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, CO - Cold Freshwater Habitat, FR - Freshwater

Replenishment, IN - Industrial Service Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, 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: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO

for pH is 6.5 (minimum) to 8.5 (maximum).

Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Ten of 20 samples were in exceedance (SWRCB, 2003). Data Used to Assess Water

Quality:

Spatial Representation: Samples were collected at Barrett Reservoir station BAA-0.

Temporal Representation: Samples were collected on a quarterly basis from 03/1996 to 12/2000.

QA/QC Equivalent: Data used in 2002 assessment.

Water Segment: Batiquitos Lagoon

Pollutant: Phosphorus

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 basin plan water quality goal of 0.1 mg/l in

stream and flowing waters.

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 water quality goal of 0.1 mg/l in stream and flowing waters 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, WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisances or adversely affects beneficial uses. Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/l in stream and flowing waters. Threshold total phosphorus concentration shall not exceed 0.05 mg/L in any stream at the point where it enters any standing body of water, nor 0.025 mg/L in any standing body of water.

Data Used to Assess Water

Quality:

Four samples; four samples exceeding (SWAMP, 2004).

Spatial Representation: One Station at San Marcos Creek: 33.13027 -117.192.

Temporal Representation: Four samples collected from March through September of 2002.

Environmental Conditions: San Marcos Creek Watershed- Batiquitos Lagoon

San Marcos Creek 904.52 (33.13027 -117.192).

Data Quality Assessment: Swamp Quality Assurance Plan.

Matrix:

Water Segment:	Buena 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.
	One line of evidence is available in the administrative record to assess this pollutant. A large number of samples exceed the California Toxic Rule: Human Health carcinogenic risk for consumption of water & organisms of 0.00059 ug/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.Four of 4 samples exceeded the CTR DDT 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:	AG - Agricultural Supply, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI Wildlife Habitat

Water Quality Objective/ Water Quality Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial

uses.

California Toxic Rule: Human Health carcinogenic risk for consumption of

water & organisms, 0.00059 ug/L.

Data Used to Assess Water

Quality:

Four of 4 samples exceeded the CTR criterion (SWAMP, 2004).

Spatial Representation: One sample site in Buena Creek at 33.17225 - 117.20887.

Temporal Representation: Samples were collected from March through September of 2002.

Environmental Conditions: Buena Creek 904.32

Data Quality Assessment: SWAMP Quality Assurance Plan.

Matrix:

Buena Creek **Water Segment:** Nitrate and Nitrite **Pollutant: Decision:** List This pollutant is being considered for placement on the section 303(d) list under **Weight of Evidence:** 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 MCL 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. Four of 4 samples exceeded the nitrate and nitrite primary MCL 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** 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 **Recommendation:** 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, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -Wildlife Habitat

Water Quality Objective/ Waters designated for use as domestic or municipal supply shall not contain Water Quality Criterion: concentrations of nitrate and nitrite as nitrogen in excess of Maximum

Contaminant Levels (MCL) set forth in title 22 of the CCR, Table 64431-A of

section 64431.

Data Used to Assess Water

Quality:

Four of 4 samples exceeded the MCLs (SWAMP, 2004).

Spatial Representation: One sample site at Buena Creek: 33.17225 - 117.20887.

Temporal Representation: Samples were collected from March through September of 2002.

Environmental Conditions: Buena Creek 904.32.

Data Quality Assessment: SWAMP Quality Assurance Plan

Matrix:

Buena Creek **Water Segment:** Phosphate **Pollutant: Decision:** List This pollutant is being considered for placement on the section 303(d) list under **Weight of Evidence:** 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 phosphate goal of 0.1 mg/l in stream and flowing waters. 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 phosphate 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. After review of the available data and information, SWRCB staff concludes that the **SWRCB Staff** water body-pollutant combination should be placed on the section 303(d) list because **Recommendation:** applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. **Lines of Evidence:** Numeric Line of Evidence Pollutant-Water AG - Agricultural Supply, MU - Municipal & Domestic, R1 - Water Contact Beneficial Use: Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -Wildlife Habitat

Water Quality Objective/ Waters shall not con Water Quality Criterion: water quality Criterion:

Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisances or adversely affects beneficial uses. Water Quality Control Plan phosphate goal of

0.1 mg/l in stream and flowing waters.

Data Used to Assess Water

Quality:

Four water samples, four samples exceeding the basin plan goal (SWAMP,

2004).

Spatial Representation: One Station at Buena Creek: 33.17225 -117.20887.

Temporal Representation: Samples were collected from March through September of 2002.

Environmental Conditions: Buena Creek 904.32.

Data Quality Assessment: SWAMP Quality Assurance Plan.

Matrix:

Buena Creek **Water Segment:** Sulfates **Pollutant: Decision:** List This pollutant is being considered for placement on the section 303(d) list under Weight of Evidence: 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 Title 22 Table 64449-B Secondary Maximum Contaminant Levels 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. Four of 4 samples exceeded the MCL guidelines for sulfate 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. After review of the available data and information, SWRCB staff concludes that the **SWRCB Staff** water body-pollutant combination should be placed on the section 303(d) list because **Recommendation:** applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. **Lines of Evidence:** Numeric Line of Evidence Pollutant-Water AG - Agricultural Supply, MU - Municipal & Domestic, R1 - Water Contact Beneficial Use: Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -Wildlife Habitat

Water Quality Objective/ Basin Plan WQO - Title 22 Table 64449-B Secondary Maximum Contaminant

Water Quality Criterion: Levels of 250 mg/l; Upper Limit- 500 mg/l; Short Term- 1500 mg/l.

Data Used to Assess Water

Quality:

Four of 4 samples exceeded the Basin Plan recommended secondary MCL

(SWAMP, 2004).

Spatial Representation: Two Stations at Buena Creek: 33.17225 -117.20887.

Temporal Representation: Samples were collected from March through September of 2002.

Data Quality Assessment: SWAMP Quality Assurance Plan.

Water Segment: Buena Vista Creek

Pollutant: Sediment Bioassays -- Chronic Toxicity -- Freshwater

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 Toxicity 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 4 samples exhibited significant toxicity using the 10-day Hyalella azteca 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 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, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Sediment

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. 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 Regional Board (Region 9 Basin Plan, pages 3-15 to 3-16; September 8, 1994).

Data Used to Assess Water Ouality:

Two out of four samples displayed statistically significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%. All samples were tested using the 10-day Hyalella azteca test. Note that all four samples actually had significant toxicity relative to the control, but only the two samples without any QA qualifiers were considered as exceedances (SWAMP, 2004).

Spatial Representation:

All samples were collected from one station, Buena Vista Creek 4.

Temporal Representation:

Samples were collected from March 2002 through September 2002. Toxicity in the survival endpoint was detected in samples collected on March 12, 2002 and September 16, 2002.

Environmental Conditions:

San Diego County Coastal Stream: Buena Vista Creek, Hydrologic Unit Basin Number 904.21.

Data Quality Assessment:

SWAMP QAPP.

Matrix:

Buena Vista Creek **Water Segment: Pollutant:** Total Dissolved Solids **Decision:** List This pollutant is being considered for placement on the section 303(d) list under **Weight of Evidence:** 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. Two of 2 samples were in exceedance of the water quality objective for total dissolved solids 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. After review of the available data and information, SWRCB staff concludes that the **SWRCB Staff** water body-pollutant combination should be placed on the section 303(d) list because **Recommendation:** applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. **Lines of Evidence:** Numeric Line of Evidence Pollutant-Water AG - Agricultural Supply, IN - Industrial Service Supply, R1 - Water Contact Beneficial Use: Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Water Quality Objective/ Water Quality Criterion:

From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for total dissolved solids is 500 mg/L. This concentration is not to be exceeded

more than 10% of the time during any one year period.

Data Used to Assess Water

Quality:

Data were collected by RWQCB9 in 1998. Two of 2 samples were in

exceedance (SWRCB, 2003).

Spatial Representation: One set of samples were collected at Buena Vista Creek at South Vista Way.

The other set were collected at Buena Vista Creek; exact location was not

reported.

Samples were collected once on 05/20/1998 and once on 06/29/1998. Temporal Representation:

QA/QC Equivalent: Data used in 2002 assessment.

Matrix:

Cottonwood Creek (in west San Diego County) **Water Segment:** DDT **Pollutant: Decision:** List This pollutant is being considered for placement on the section 303(d) list under **Weight of Evidence:** 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 freshwater 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 four samples exceeded the CTR freshwater 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** 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 **Recommendation:** 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, IN - Industrial Service Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -Wildlife Habitat

Water Quality Objective/ Water Quality Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial

uses.

California Toxic Rule: Freshwater Chronic .001 mg/L. Human Health-FW (water & organisms) .00059 mg/L.

Data Used to Assess Water

Quality:

Four water samples, two samples exceeding (SWAMP, 2004).

Spatial Representation: One station at Cottonwood Creek: 33.18147 -117.32893.

Temporal Representation: Samples were collected from March through September of 2002.

Environmental Conditions: San Marcos Creek Watershed 904.51.

Data Quality Assessment: SWAMP Quality Assurance Plan.

Matrix:

Water Segment:	Cottonwood Creek (in west San Diego County)
Pollutant:	Phosphorus
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 Basin Plan water quality goal of 0.1 mg/l in stream and flowing waters for Phosphorus.
	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 water quality goal 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, IN - Industrial Service Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI Wildlife Habitat

Water

Water Quality Objective/ Waters shall not con Water Quality Criterion: promote aquatic grow

Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisances or

adversely affects beneficial uses.

Evaluation Guideline: Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/l in stream

and flowing waters.

Data Used to Assess Water

Quality:

Four of 4 samples exceeding basin plan goal (SWAMP, 2004).

Spatial Representation: One station in Cottonwood Creek: 33.18147 -117.32893

Temporal Representation: Samples were collected from March through September of 2002.

Data Quality Assessment: SWAMP Quality Assurance Plan

Water Segment: Cottonwood Creek (in west San Diego County)

Pollutant: Sediment Bioassays -- Chronic Toxicity -- Freshwater

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.

Three samples were toxic.

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 4 samples were toxic 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: WA - Warm Freshwater Habitat

Matrix: Sediment

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. 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 Regional Board (Region 9 Basin Plan, pages 3-15 to 3-16; September 8, 1994).

Data Used to Assess Water *Ouality:*

Three out of four samples displayed statistically significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%. All samples were tested using the 10-day Hyalella azteca test. Note that all four samples actually had significant toxicity relative to the control, but only the three samples without any QA qualifiers were considered as exceedances (SWAMP, 2004).

Spatial Representation:

All samples were collected from one station, Cottonwood Creek 2.

Temporal Representation:

Samples were collected from March 2002 through September 2002. Toxicity in the survival endpoint was detected in samples collected on March 13, 2002, June

4, 2002 and September 17, 2002.

Environmental Conditions:

Cottonwood Creek = 904.51

Data Quality Assessment:

SWAMP QAPP.

Water Segment: De Luz Creek

Pollutant: Iron

Decision: List

Weight of Evidence: 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 9 samples exceeded the Basin Plan criteria, 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: AG - Agricultural Supply, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, 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/ Water Quality Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use,

the WQO for iron is 0.3 mg/L.

Data Used to Assess Water Data were collected by LAW Crandall from 1997 to 2000. Five of 9 samples

Quality: were in exceedance.

Spatial Representation: Samples were collected at De Luz Creek near Fallbrook.

Temporal Representation: Samples were collected on a quarterly basis from 12/1997 to 06/2000.

Water Segment: De Luz Creek

Pollutant: Manganese

Decision: List

Weight of Evidence: 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 9 samples exceeded the Basin Plan criteria, 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: AG - Agricultural Supply, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, 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 water quality objective for manganese in De Luz Creek is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water

Quality Objectives. This concentration is not be exceeded more than 10% of the

time during any one year period.

Data Used to Assess Water

Quality:

Data were collected by LAW Crandall from 1997 to 2000. Two of 9 samples were in exceedance.

Spatial Representation: Samples were collected at De Luz Creek near Fallbrook.

Temporal Representation: Samples were collected on a quarterly basis from 12/1997 to 06/2000.

Water Segment: De Luz Creek

Pollutant: Sulfates

Decision: List

Weight of Evidence: 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 9 samples exceeded the Basin Plan criteria, 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: AG - Agricultural Supply, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, 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/ Water Quality Criterion: From the Basin Plan: For inland surface waters and all beneficial use, the WQO for Sulfate is 250 mg/L. This concentration is not to be exceeded more than 10%

of the time during any one year period.

Data Used to Assess Water

Quality:

Data were collected by LAW Crandall from 1997 to 2000. Two of 9 samples were in exceedance.

Samples were collected at DeLuz Creek near Fallbrook. Spatial Representation:

Temporal Representation: Samples were collected on a quarterly basis from 12/1997 to 06/2000.

Water Segment: Del Dios Creek

Pollutant: Sulfates

Decision: List

Weight of Evidence:

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 Basin Plan criteria, 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: AG - Agricultural Supply

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for sulfate is 250 mg/L. This concentration is not to be exceeded more than 10%

of the time during any one year period.

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. from 04/1999 to 06/1999. Three of 3 samples were in exceedance.

Samples were collected at Del Dios Creek at the "Rd crossing res at entra."

Temporal Representation: One sample per day was collected on 04/26/1999, 05/24/1999, and 06/21/1999.

Water Segment: El Capitan Lake

Pollutant: Antimony

Decision: List

Weight of Evidence: 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 10 samples exceeded the Basin Plan criteria, 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/ From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Antimony is 0.006 mg/L.

Water Quality Criterion: for Antimony is 0.006 mg/L.

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. from 1996 to 2000.

Two of 10 samples were in exceedance.

Samples were collected at El Capitan Reservoir station ECA-0.

Temporal Representation: Samples were collected 1-4 times per year from 06/1996 to 05/2000.

Water Segment: El Capitan Lake

Pollutant: Beryllium

Decision: List

Weight of Evidence: 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 Basin Plan criteria, 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: From the Basin Plan: For all waters with a municipal beneficial use, the WQO

for Beryllium is 0.004 mg/L.

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. from 1999 to 2000.

Two of 2 samples were in exceedance.

Spatial Representation: Samples were collected at El Capitan Reservoir station ECA-0.

Temporal Representation: Samples were collected once each in 09/1999 and 05/2000.

Water Segment: El Capitan Lake

Pollutant: Color

Decision: List

Weight of Evidence: 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 1,376 out of 1,726 samples exceeding the Basin Plan objective, and these exceed 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-Nuisance

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use,

the WQO for Color is 15 units.

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. from 1996 to 1999.

Sixty-five of 80 samples were in exceedance.

Spatial Representation: Samples were collected at El Capitan Reservoir station ECA-GA152.

Temporal Representation: Samples were collected 3-5 times each month from 01/1996 to 01/1999.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Nuisance

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with a municipal beneficial use,

Water Quality Criterion: the WQO for Color is 15 units.

Data Used to Assess Water Data were collected by the City of San Diego Water Dept. from 1996 to 1998.

Quality: Fifty-five of 62 samples were in exceedance.

Spatial Representation: Samples were collected at El Capitan Reservoir station ECA-GA157.

Temporal Representation: Samples were collected 3-5 times per month from 01/1996 to 10/1998.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Nuisance

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with a municipal beneficial use,

Water Quality Criterion: the WQO for Color is 15 units.

Data Used to Assess Water Data were collected by the City of San Diego Water Dept. in 1996. Six of 6

Quality: samples were in exceedance.

Spatial Representation: Samples were collected at El Capitan Reservoir station ECA-GA177.

Temporal Representation: Samples were collected 6 times (once each on different days) from 01/03/1996

to 02/07/1996.

Numeric Line of Evidence Pollutant-Nuisance

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with a municipal beneficial use,

Water Quality Criterion: the WQO for Color is 15 units.

Data Used to Assess Water Data were collected by the City of San Diego Water Dept. from 1996 to 2000.

Quality: One-hundred and seventy-two out of 212 samples were in exceedance. An

exceedance of standards occurred during all sampling years.

Spatial Representation: Samples were collected at El Capitan Reservoir station ECA-0.

Temporal Representation: Samples were collected 2-5 times per month from 01/1996 to 09/2000.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Nuisance

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with a municipal beneficial use,

Water Quality Criterion: the WQO for Color is 15 units.

Data Used to Assess Water Dept. from 1996 to 2000.

Quality: There were 171 out of 241 samples in exceedance.

Spatial Representation: Samples were collected at El Capitan Reservoir station ECA-GA107.

Temporal Representation: Samples were collected 1-5 times per month from 01/1996 to 12/2000.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Nuisance

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use,

the WQO for Color is 15 units.

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. from 1996 to 2000.

There were 179 out of 241 samples that were in exceedance.

Spatial Representation: Samples were collected at El Capitan Reservoir station ECA-GA82.

Temporal Representation: Samples were collected 1-5 times per month from 01/1996 to 12/2000.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Nuisance

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use,

the WQO for Color is 15 units.

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. from 1996 to 1999. There were 110 out of 135 samples that were in exceedance of 15 color units.

Spatial Representation: Samples were collected at El Capitan Reservoir station ECA-GA127.

Temporal Representation: Samples were collected 3-5 times per month from 01/1996 to 02/1999.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Nuisance

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use,

the WQO for Color is 15 units.

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. from 1996 to 1999.

There were 121 out of 154 samples that were in exceedance.

Spatial Representation: Samples were collected at El Capitan Reservoir station ECA-GA132.

Temporal Representation: Samples were collected 3-5 times per month from 01/1996 to 08/1999.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Nuisance

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with a municipal beneficial use,

Water Quality Criterion: the WQO for Color is 15 units.

Data Used to Assess Water Data were collected by the City of San Diego Water Dept. from 1996 to 1999.

Quality: There were 140 out of 162 samples that were in exceedance.

Samples were collected at El Capitan Reservoir station ECA-GA102.

Temporal Representation: Samples were collected 3-5 times per month from 01/1996 to 02/1999.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Nuisance

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with a municipal beneficial use,

Water Quality Criterion: the WQO for Color is 15 units.

Data Used to Assess Water Data were collected by the City of San Diego Water Dept. from 1996 to 2000.

Quality: There were 155 out of 192 samples that were in exceedance.

Spatial Representation: Samples were collected at El Capitan Reservoir station ECA-0.

Temporal Representation: Samples were collected 1-6 times per month from 01/1996 to 12/2000.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Nuisance

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with a municipal beneficial use,

Water Quality Criterion: the WQO for Color is 15 units.

Data Used to Assess Water Data were collected by the City of San Diego Water Dept. from 1996 to 2000.

Quality: There were 202 out of 241 samples that were in exceedance.

Spatial Representation: Samples were collected at El Capitan Reservoir station ECA-GA57.

Temporal Representation: Samples were collected 1-5 times per month from 01/1996 to 12/2000.

Water Segment: El Capitan Lake

Pollutant: Manganese

Decision: List

Weight of Evidence: Base

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. Thirteen of 64 samples exceeded the Basin Plan criteria and 4 out of 5 years had exceedances more than 10% or the time. 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:

The water quality objective for manganese in El Capitan Lake is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not be exceeded more than 10% of the

time during any one year period.

Data Used to Assess Water Data were collected by the City of San Diego Water Dept. from 1996 to 2000.

Thirteen of 64 samples were in exceedance of 0.05 mg/L. Four out of 5 years had exceedances more than 10% or the time. Quality:

Samples were collected at El Capitan Reservoir station ECA-0. Spatial Representation:

Samples were collected 1-2 times monthly from 01/1996 to 11/2000, with the Temporal Representation:

exception of 01/1997.

Water Segment: El Capitan Lake

Pollutant: Total Dissolved Solids

Decision: List

Weight of Evidence: 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 30 samples exceeded the Basin Plan criteria, 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: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 300 mg/L. This concentration is not to be exceeded more than 10% of

the time during any one year period.

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. from 1998 to 2000.

Seven of 30 samples were in exceedance.

Samples were collected at El Capitan Reservoir station ECA-0.

Temporal Representation: Samples were collected monthly from 07/1998 to 12/2000.

Water Segment: El Capitan Lake

Pollutant: pH (high)

Decision: List

Weight of Evidence: 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 the 57 samples exceeded the Basin Plan objective, and these exceed 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/ From the Basin Plan: For inland surface waters and all beneficial uses, the WQO

Water Quality Criterion: for pH is 6.5 (minimum) to 8.5 (maximum).

Data Used to Assess Water Dept. from 1996 to 2000.

Quality: Ten of 57 samples were in exceedance.

Spatial Representation: Samples were collected at El Capitan Reservoir station ECA-0.

Temporal Representation: Samples were collected monthly from 01/1996 to 12/2000, except for 01/1997.

Water Segment: Encinitas Creek

Pollutant: Phosphorus

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 Basin Plan water quality goal.

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 0.1 mg/l basin plan water quality goal 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, R1 - Water Contact Recreation, R2 - Non-Contact

Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Waters shall not contain biostimulatory substances in concentrations that

Water Quality Criterion: promote aquatic growth to the extent that such growth causes nuisances or

adversely affects beneficial uses.

Evaluation Guideline: Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/l in stream

and flowing waters.

Data Used to Assess Water

Quality:

Four water samples, 4 samples exceeding (SWAMP, 2004).

Spatial Representation: One station at Encinitas Creek: 33.06828 -117.26261

Temporal Representation: Samples were collected from March through September of 2002.

Environmental Conditions: San Marcos Creek Watershed 904.51.

Data Quality Assessment: SWAMP Quality Assurance Plan.

Matrix:

English Canyon Water Segment: Pollutant: Benzo[b]fluoranthene **Decision:** List This pollutant is being considered for placement on the section 303(d) list under Weight of Evidence: 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 California Toxic Rule: Human Health-FW (water and organisms) .0044 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. Two of 4 samples exceeded the CTR human health freshwater 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. After review of the available data and information, SWRCB staff concludes that the **SWRCB Staff** water body-pollutant combination should be placed on the section 303(d) list because **Recommendation:** applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. **Lines of Evidence:** Numeric Line of Evidence Pollutant-Water AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), R1 -Beneficial Use: Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

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.

Evaluation Guideline:

California Toxic Rule: Human Health-FW (water and organisms) .0044 mg/L.

Data Used to Assess Water

Quality:

Four samples, two samples exceeding (SWAMP, 2004).

Spatial Representation:

One Station at English Creek: 33.62781 -117.68058.

Temporal Representation:

Samples were collected from October 2002 through May 2003.

Environmental Conditions:

Aliso Creek Watershed 901.11.

Data Quality Assessment:

SWAMP Quality Assurance Plan.

Matrix:

English Canyon Water Segment: Dieldrin **Pollutant: Decision:** List This pollutant is being considered for placement on the section 303(d) list under Weight of Evidence: 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 California Toxic Rule-Human Health-FW (water and organisms) .00014 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. Three of 4 samples exceeded the CTR human health freshwater 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. After review of the available data and information, SWRCB staff concludes that the **SWRCB Staff** water body-pollutant combination should be placed on the section 303(d) list because **Recommendation:** applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. **Lines of Evidence:** Numeric Line of Evidence Pollutant-Water WA - Warm Freshwater Habitat Beneficial Use:

Water

Water Quality Objective/ California T Water Quality Criterion:

California Toxic Rule-Human Health-FW (water and organisms) .00014 ug/L.

Data Used to Assess Water

Quality:

Four samples, three samples exceeding (SWAMP, 2004).

Spatial Representation: One Station at English Creek: 33.62781 -117.68058

Temporal Representation: Samples were collected from October 2002 through May 2003.

Environmental Conditions: Aliso Creek Watershed 901.11.

Data Quality Assessment: SWAMP Quality Assurance Plan.

Water Segment: English Canyon

Pollutant: Sediment Bioassays -- Chronic Toxicity -- Freshwater

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 water quality objectives.

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 narrative 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: WA - Warm Freshwater Habitat

Matrix: Sediment

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. 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 Regional Board (Region 9 Basin Plan, pages 3-15 to 3-16; September 8, 1994).

Data Used to Assess Water

Quality:

Two out of four samples displayed statistically significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%. All samples were tested using the 10-day Hyalella azteca test. All data points had no associated QA qualifiers (SWAMP, 2004).

Spatial Representation: All samples were collected from one station, English Creek 2.

Temporal Representation: Samples were collected from October 2002 through May 2003. Toxicity in the

survival endpoint was detected in samples collected on October 28, 2002 and

January 13, 2003.

Environmental Conditions: English Canyon Creek is located in Hydrologic Unit 901.13.

Data Quality Assessment: SWAMP QAPP.

Matrix:

Escondido Creek **Water Segment:** DDT **Pollutant: Decision:** List This pollutant is being considered for placement on the section 303(d) list under Weight of Evidence: 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 California Toxic Rule: Human Health-FW (water & organisms) criterion of 0.00059 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. Five of 8 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. After review of the available data and information, SWRCB staff concludes that the **SWRCB Staff** water body-pollutant combination should be placed on the section 303(d) list because **Recommendation:** applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. **Lines of Evidence:** Numeric Line of Evidence Pollutant-Water AG - Agricultural Supply, MU - Municipal & Domestic, R1 - Water Contact Beneficial Use: Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -Wildlife Habitat

Water

Water Quality Objective/ San Diego RWQCB Basin Plan: No individual pesticide or combination of Water Quality Criterion: pesticides shall be present in the water column, sediments, or biota at

concentration(s) that adversely affect beneficial uses.

California Toxic Rule: Human Health-FW (water & organisms) .00059 mg/L

Data Used to Assess Water

Quality:

Eight total samples taken at two stations, a total of five samples from two

sampling stations exceeded the CTR criteria (SWAMP, 2004).

Spatial Representation: Two Escondido Creek stations located at 33.03393 -117.23565 and at 33.08559 -

117.15037.

Temporal Representation: Eight samples collected from March through September of 2002.

Environmental Conditions: Escondido Creek Watershed; Escondido Creek 904.61.

Data Quality Assessment: SWAMP Quality Assurance Plan.

Water Segment: Escondido Creek

Pollutant: Manganese

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 Secondary Drinking Water MCLs of 0.05

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.Six of 12 samples exceeded the secondary MCL for manganese 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/ The water quality objective for manganese in Escondido Creek is 0.05

Water Quality Criterion: milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water

Quality Objectives. This concentration is not be exceeded more than 10% of the

time during any one year period.

Data Used to Assess Water

Quality:

Twelve water samples, six samples exceeding (SWAMP, 2004).

Spatial Representation: Two stations at Escondido Creek ESC5, HBA 904.62 (33.08559 -117.15037)

and ESC8, HBA 904.61(33.03393 -117.23565).

Temporal Representation: Twelve samples collected from March through September of 2002.

Escondido Creek Watershed; Escondido Creek 904.61 and 904.62

Data Quality Assessment: SWAMP Quality Assurance Plan.

Water Segment: Escondido Creek

Pollutant: Phosphate

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 goal of 0.1 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.

 $3.\mathrm{Six}$ of 8 samples exceeded the basin plan water quality goal 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, R1 - Water Contact Recreation, R2 - Non-Contact

Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Control Plan for the San Diego Basin; 0.1 mg/l in stream and

Water Quality Criterion: flowing waters.

Data Used to Assess Water

Quality:

Eight water samples, six samples exceeding (SWAMP, 2004).

Spatial Representation: Two stations at Escondido Creek ESC5, HBA 904.62 (33.08559 -117.15037)

and at ESC8, HBA 904.61 (33.03393 -117.23565).

Temporal Representation: Eight samples collected from March through September of 2002.

Environmental Conditions: Escondido Creek Watershed; Escondido Creek 904.61 and 904.62.

Data Quality Assessment: SWAMP Quality Assurance Plan.

Water Segment: Escondido 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.

Two lines of evidence are available in the administrative record to assess this pollutant. In 1998 a single sample was collected and it did not exceed the Basin Plan water quality criteria. However, SWAMP data taken in 2002 documented a large number of samples exceeding the CTR freshwater CCC criterion of 5 mg/L 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 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 SWAMP samples exceeded the CTR chronic freshwater criterion and this exceeds the allowable frequency listed in Table 3.1 on 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, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For all waters with a municipal beneficial use, the WQO

Water Quality Criterion: for Selenium is 0.05 mg/L.

Data Used to Assess Water Data were collected by RWQCB9 in 1998. One sample was collected, it was not

Quality: in exceedance (SWAMP, 2004).

Spatial Representation: Samples were collected at Escondidio Creek at the intersection of Elfin Forest

and Harmony Grove.

Temporal Representation: Samples were collected on 06/03/1998.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Water

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

Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

CTR Freshwater Chronic (CCC) 5 mg/l.

Data Used to Assess Water

Quality:

Twelve water samples, eight samples exceeding (SWAMP, 2004).

Spatial Representation: Two stations at Escondido Creek ESC5, HBA 904.62 (33.08559 -117.15037)

and ESC8, HBA 904.61(33.03393 -117.23565).

Temporal Representation: Twelve samples collected from March through September of 2002.

Escondido Creek Watershed; Escondido Creek 904.61 and 904.62

Data Quality Assessment: SWAMP Quality Assurance Plan.

Water Segment: Escondido Creek

Pollutant: Sulfates

Decision: List

Weight of Evidence: 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 5 DWR samples taken from 1998 to 2000 and 4 of 4 SWAMP samples taken from March through September 2002 exceeded the Basin Plan criteria, 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, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for sulfate is 250 mg/L. This concentration is not to be exceeded more than 10%

of the time during any one year period.

Data Used to Assess Water Data were collected by DWR from 1998 to 2000. Four of 5 samples were in

Quality: exceedance (S.D. Department of Water Resources, 2000).

Samples were collected at Escondido Creek near Harmony Grove.

Temporal Representation: Samples were collected once each in May and November each year from

05/1998 to 05/2000.

Numeric Line of Evidence Pollutant-Water

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

Habitat

Matrix: Water

Quality:

Water Quality Objective/ The recommended secondary drinking water standard for sulfate is 250 mg/l

Water Quality Criterion: with an upper limit of 500 (Basin Plan).

Data Used to Assess Water Four water samples, four samples exceeding (SWAMP, 2004).

Spatial Representation: One station at Escondido Creek: 33.03393 -117.23565.

Temporal Representation: Four samples were collected from March through September of 2002.

Environmental Conditions: Escondido Creek Watershed; Escondido Creek 904.61.

Data Quality Assessment: SWAMP Quality Assurance Plan.

Escondido Creek **Water Segment:**

Total Dissolved Solids **Pollutant:**

Decision: List

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

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 7 samples exceeded the Basin Plan criteria, and these exceed 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, CO - Cold Freshwater Habitat, IN - Industrial Service

> Supply, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of

the time during any one year period.

Data Used to Assess Water Data were collected by RWQCB9 in 1998. One sample was collected, it was in Quality: exceedance.

Spatial Representation: Samples were collected at Escondido Creek below Harmony Grove Bridge.

Temporal Representation: Samples were collected on 06/03/1998.

QA/QC Equivalent: Data used in 2002 assessment.

Pollutant-Water Numeric Line of Evidence

Beneficial Use: AG - Agricultural Supply, CO - Cold Freshwater Habitat, IN - Industrial Service

> Supply, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters and all beneficial uses, the WQO Water Quality Criterion:

for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of

the time during any one year period.

Data Used to Assess Water

Quality:

Data were collected by RWQCB9 in 1998. One sample was collected, it was in

exceedance (SWRCB, 2003).

Spatial Representation: Samples were collected at Escondido creek at the intersection of Elfin Forest and

Harmony Grove.

Temporal Representation: Samples were collected on 06/03/1998.

QA/QC Equivalent: Data used in 2002 assessment.

Pollutant-Water Numeric Line of Evidence

Beneficial Use: AG - Agricultural Supply, CO - Cold Freshwater Habitat, IN - Industrial Service

> Supply, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters and all beneficial uses, the WQO Water Quality Criterion:

for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of

the time during any one year period.

Data Used to Assess Water

Quality:

Data were collected by DWR from 1998 to 2000. Three of 5 samples were in

exceedance (SWRCB, 2003).

Spatial Representation: Samples were collected at Escondido Creek near Harmony Grove.

Samples were collected once each in May and November each year from 05/1998 to 11/2000. Temporal Representation:

Water Segment: Felicita Creek

Pollutant: Aluminum

Decision: List

Weight of Evidence: 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 Basin Plan criteria, 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: From the Basin Plan: For inland surface waters with a municipal beneficial use,

the WQO for Aluminum is 0.2 mg/L.

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. from 02/2000 to

04/2000. Two of 6 samples were in exceedance.

Spatial Representation: Samples were collected at Felicita Creek site FEL3 at the road crossing above

the water line.

Samples were collected from 02/22/2000 to 04/18/2000. One sample was collected in 02/2000, 2 samples were collected in 03/2000, and 3 samples were collected in 04/2000. Temporal Representation:

QA/QC Equivalent: Data used in 2002 assessment.

Water Segment: Forester Creek

Pollutant: Oxygen, Dissolved

Decision: List

Weight of Evidence: One line of evidence is available in the administrative record to assess this pollutant.

Three of the 10 samples exceed the Basin Plan criteria (which is more than 10% of the

time) and this exceeds the allowable frequency 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 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:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: IN - Industrial Service Supply

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of

the time.

Data Used to Assess Water

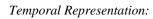
Quality:

Data were collected at Forester Creek by the City of El Cajon in 09/1997 and monthly from 04/2000-12/2000. Three of 10 averages were below 7.0 mg/L,

which is more than 10% of the time.

Spatial Representation: Samples were collected at Forester Creek. The exact sample location is

unknown.



Samples were collected in 09/1997 and monthly from 04/2000-12/2000. Averages were reported. It is unknown how many samples were collected per month.

Forester Creek **Water Segment:**

Pollutant: Phosphorus

Decision: List

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

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 10 samples exceeded the Basin Plan criteria, 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: IN - Industrial Service Supply

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

From the Basin Plan: For inland surface waters-streams and other flowing waters, with all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be desired goal in order to prevent plant nuisance in streams and other

flowing waters; not to be exceeded more than 10% of the time.

Data Used to Assess Water

Quality:

Data were collected by the City of El Cajon in 09/1997 and monthly from 04/2000-12/2000. Only monthly averages were reported. Three of 10 averages were at or in exceedance of the standard.

Samples were collected at Forester Creek. The exact sampling location was not

reported.

Temporal Representation: Samples were collected in 09/1997 and monthly from 04/2000-12/2000. Only

monthly averages were reported. It is unknown how many samples the monthly

average represents.

QA/QC Equivalent: Data used in 2002 assessment.

Water Segment: Green Valley Creek

Pollutant: Chloride

Decision: List

Weight of Evidence: 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 Basin Plan criteria, and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

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: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Chloride is 250 mg/L. This concentration is not to be exceeded

more than 10% of the time during any one year period.

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. from 04/1999 to

04/2000. Six of 13 samples were in exceedance.

Samples were collected at Green Valley Creek west of West Bernardo Drive. Spatial Representation:

Samples were collected from 04/1999 to 04/2000. Three samples were collected in 1999 and 10 samples were collected in 2000. Temporal Representation:

QA/QC Equivalent: Data used in 2002 assessment.

Water Segment: Green Valley Creek

Pollutant: Manganese

Decision: List

Weight of Evidence: 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 criteria and both years had exceedances more than 10% or the time. 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: The water quality objective for manganese in Green Valley Creek is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not be exceeded more than 10% of the

time during any one year period.

Data Used to Assess Water Data were collected by the City of San Diego Water Dept. on four days from

Quality: 4/26/1999 to 4/18/2000. Four of 4 samples were in exceedance.

Samples were collected at Green Valley Creek west of West Bernardo Drive.

Temporal Representation: One sample per day was collected on 04/26/1999, 03/13/2000, 03/21/2000, and

04/18/2000.

QA/QC Equivalent: Data used in 2002 assessment.

Green Valley Creek **Water Segment:**

Pentachlorophenol (PCP) **Pollutant:**

Decision: List

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

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 Basin Plan criteria, 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/ From the Basin Plan: For inland surface waters with a municipal beneficial use,

Water Quality Criterion: the WQO for Pentachlorophenol is 0.001 mg/L.

Data were collected by the City of San Diego Water Dept. on 02/15/2000 and Data Used to Assess Water

02/22/2000. Two of 2 samples were in exceedance. Quality:

Spatial Representation: Samples were collected at Green Valley Creek west of West Bernardo Drive.

Samples were collected on 02/15/2000 and 02/22/2000. One sample was collected on each day. $Temporal\ Representation:$

QA/QC Equivalent: Data used in 2002 assessment.

Water Segment: Hodges, Lake

Pollutant: Manganese

Decision: List

Weight of Evidence:

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 19 samples exceeded the Basin Plan criteria and all 5 years had samples which exceeded 0.05 mg/L more than 10% of the time. 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: The water quality objective for manganese in Hodges Lake is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not be exceeded more than 10% of the time during any one year period.

time during any one year period

Data Used to Assess Water Quality:

Data was collected at site HGA-0 by the City of San Diego Water Dept. between January 1996 and September 2000. Nine of 19 samples were in exceedance. All

5 years had samples which exceeded 0.05 mg/L more than 10% of the time.

Spatial Representation: Samples were collected at site HGA-0.

Temporal Representation: Samples were collected on a quarterly basis from January 1996 to September

2000.

QA/QC Equivalent: Data used in 2002 assessment.

Water Segment: Hodges, Lake

Pollutant: Turbidity

Decision: List

Weight of Evidence: 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 20 samples exceeded the Basin Plan criteria, and these exceed 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, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Criterion:

Water Quality Objective/ From the Basin Plan: For inland surface waters with a municipal beneficial use,

the WQO for turbidity is 5 units. For inland surface waters with all other

beneficial uses, the WQO for turbidity is 20 ntu.

Data Used to Assess Water Data was collected at site HGA-0 by the City of San Diego Water Dept. from

Quality: March 1996 to December 2000. 11 of 20 samples were in exceedance of the

WQO for municipal beneficial uses.

Spatial Representation: Samples were collected at site HGA-0.

Temporal Representation: Samples were collected on a quarterly basis from March 1996 to December

2000.

QA/QC Equivalent: Data used in 2002 assessment.

Water Segment: Hodges, Lake

Pollutant: pH (high)

Decision: List

Weight of Evidence: 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 the 20 samples exceeded the Basin Plan criteria, and these exceed 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, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with all beneficial uses, the

Water Quality Criterion: WQO for pH is 6.5 (minimum) to 8.5 (maximum).

Data Used to Assess Water Data was collected at site HGA-0 by the City of San Diego Water Dept. from

Quality: March 1996 to December 2000. Fourteen of the 20 samples exceeded the

maximum pH standard of 8.5.

Spatial Representation: Data was collected at site HGA-0.

Temporal Representation: Samples were collected on a quarterly basis between March 1996 and December

2000.

QA/QC Equivalent: Data used in 2002 assessment.

Water Segment: Imperial Beach Pier

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. Three 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 Diego 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: 20 ng/g (OEHHA Screening Value).

Data Used to Assess Water

Quality:

Three out of 4 samples exceeded. All 4 samples were filet composites. Two samples of barred surfperch and two of walleye surfperch were collected. All

exceeded guideline except one walleye sample (TSMP, 2002).

Spatial Representation: One station was sampled on the Imperial Beach Pier.

Temporal Representation: Samples were collected in March 1999 and April 2000.

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.

Matrix:

Kit Carson Creek **Water Segment: Pollutant:** Pentachlorophenol (PCP) **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 adequate 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 satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 2 samples exceeded the 0.001 mg/L MCL for pentachlorophenol in inland surface waters, 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. After review of the available data and information, SWRCB staff concludes that the **SWRCB Staff** water body-pollutant combination should be placed on the section 303(d) list because **Recommendation:** applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. **Lines of Evidence:** Pollutant-Water Numeric Line of Evidence AG - Agricultural Supply, IN - Industrial Service Supply, MU - Municipal & Beneficial Use: Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 -Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with a municipal beneficial use,

Water Quality Criterion: the WQO for pentachlorophenol is 0.001 mg/L.

Data Used to Assess Water Data were collected by the City of San Diego Water Dept. in 2000. Two of 2

Quality: samples were in exceedance.

Spatial Representation: Samples were collected at Kit Carson Creek at Sunset Dr.

Temporal Representation: Samples were collected once each on 02/22/2000 and 03/06/2000.

QA/QC Equivalent: Data used in 2002 assessment.

Water Segment: Laguna Canyon Channel

Pollutant: Sediment Bioassays -- Chronic Toxicity -- Freshwater

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 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 4 samples exceeded the narrative 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: WA - Warm Freshwater Habitat

Matrix: Sediment

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. 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 Regional Board (Region 9 Basin Plan, pages 3-15 to 3-16; September 8, 1994).

Data Used to Assess Water

Quality:

Two out of four samples displayed statistically significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%. All samples were tested using the 10-day Hyalella azteca test. All data points had no associated QA qualifiers (SWAMP, 2004).

Spatial Representation:

All samples were collected from one station, Laguna Canyon Creek 2.

Temporal Representation:

Samples were collected from October 2002 through May 2003. Toxicity in the survival endpoint was detected in samples collected on October 29, 2002 and

January 14, 2003.

Data Quality Assessment:

SWAMP QAPP.

Water Segment: Loma Alta Creek

Pollutant: Total Dissolved Solids

Decision: List

Weight of Evidence: 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 Basin Plan criteria, and these exceed the allowable frequency 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: R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm

Freshwater Habitat, WI - Wildlife Habitat

Matrix: -N/A

Water Quality Objective/ From Water Quality Criterion: WQC

From the Basin Plan: For inland surface waters with all beneficial uses, the WQO for Total Dissolved Solids is 500 mg/L. This concentration is not to be

exceeded more than 10% of the time during any one year period.

Data Used to Assess Water

Quality:

The samples were collected by RWQCB9 on 5/20/1998 at two locations on Loma Alta Creek, Two of the 2 samples for TDS were in exceedance.

Two samples were taken along Loma Alta Creek; one at College Blvd. and one at El Camino Real. Spatial Representation:

Temporal Representation: One sample was taken at each of the two locations on one day, 5/20/1998.

Water Segment: Long Canyon Creek

Pollutant: Total Dissolved Solids

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.

Six 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 for 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 satisfies the requirements of section 6.1.5 of the Listing Policy.

3. Six of 25 samples exceeded the 500 mg/L TDS Basin Plan water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.

3. 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, CO - Cold Freshwater Habitat, FR - Freshwater

Replenishment, IN - Industrial Service Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters and all beneficial uses, the WQO Water Quality Criterion:

for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of

the time during any one year period.

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. in 1997 and 1998. Six

of the 25 samples were in exceedance. All 6 samples were collected on

01/29/1998.

Samples were collected at Long Canyon Creek site LCC2. Spatial Representation:

Samples were collected on 03/12/1997, 05/13/1997, 06/18/1997, and Temporal Representation:

01/29/1998. Five to nine of the samples were collected per day over a period of

3 minutes to 1.5 hours.

Matrix:

Los Penasquitos Creek **Water Segment: Pollutant:** Phosphate **Decision:** List This pollutant is being considered for placement on the section 303(d) list under Weight of Evidence: 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 Control Plan goal of 0.1 mg/l in stream and flowing waters. 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 4 samples exceeded the basin plan water quality goal 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. After review of the available data and information, SWRCB staff concludes that the **SWRCB Staff** water body-pollutant combination should be placed on the section 303(d) list because **Recommendation:** applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. **Lines of Evidence:** Numeric Line of Evidence Pollutant-Water AG - Agricultural Supply, R1 - Water Contact Recreation, R2 - Non-Contact Beneficial Use: Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Water

Water Quality Objective/ Waters shall not contain biostimulatory substances in concentrations that Water Quality Criterion: water quality Criterion:

adversely affects beneficial uses. Water Quality Control Plan for the San Diego

Basin Goal of 0.1 mg/l in stream and flowing waters

Data Used to Assess Water

Quality:

Four water samples, two samples exceeding (SWAMP, 2004).

Spatial Representation: One station at Los Penasquitos Creek: 32.90588 -117.22703.

Temporal Representation: Four samples collected from March through September of 2002.

Environmental Conditions: Los Penasquitos Creek, 906.10.

Data Quality Assessment: SWAMP Quality Assurance Plan.

Water Segment: Los Penasquitos Creek

Pollutant: Total Dissolved Solids

Decision: List

Weight of Evidence: 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 Basin Plan criteria, and these exceed the allowable frequency 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, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA -

Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan, Table 3-2: For inland surface waters with all Beneficial Uses, the WQO for Total Dissolved Solids is 500mg/L. This concentration is not

to be exceeded more than 10% of the time during any one year period.

Data Used to Assess Water

Quality:

Data is from samples collected by the RWQCB on 6/3/1998 in Los Penasquitos Creek. Samples were collected at two sites; upstream of Black Mountain Rd and

at Cobblestone Creek Rd. Two of the 2 samples are in exceedance.

Samples were collected at two locations in Los Penasquitos Creek: upstream of Black Mountain Rd. and at Cobblestone Creek Rd. Spatial Representation:

Temporal Representation: Samples were collected on 6/3/1998

Water Segment: Loveland Reservoir

Pollutant: Aluminum

Decision: List

Weight of Evidence: 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 4 samples exceeded the Basin Plan criteria, 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: AG - Agricultural Supply, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm

Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Water Quality Criterion: the WQC

From the Basin Plan: For inland surface waters with a municipal beneficial use,

the WQO for Aluminum is 0.2 mg/L.

Data Used to Assess Water

Quality:

Data were collected by Sweetwater Authority from 1997 to 2000, with one sample being collected per year. Two of the 4 samples were in exceedance.

Spatial Representation: Samples were collected at Loveland Reservoir. Exact location was not reported.

Temporal Representation: Samples were collected in 12/1997, 06/1998, 07/1999, and 02/2000. One sample

was collected per year.

Loveland Reservoir **Water Segment:**

Pollutant: Manganese

Decision: List

Weight of Evidence:

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 4 samples exceeded the Basin Plan criteria, 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:

Pollutant-Water Numeric Line of Evidence

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

The water quality objective for manganese in Loveland Reservoir is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not be exceeded more than 10% of the

time during any one year period.

Data Used to Assess Water Quality:

Data were collected by Sweetwater Authority from 1997 to 2000. Two of the 4 samples were in exceedance. Two years had samples which exceeded 0.05 mg/L more than 10% of the time.

Spatial Representation: Samples were collected at Loveland Reservoir. Exact location was not reported.

Temporal Representation: Samples were collected in 12/1997, 06/1998, 07/1999, and 02/2000. One sample

was collected each year.

Water Segment: Loveland Reservoir

Pollutant: Oxygen, Dissolved

Decision: List

Weight of Evidence: 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. Forty five of the 72 samples exceeded the Basin Plan criteria, 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: CO - Cold Freshwater Habitat, MU - Municipal & Domestic, WA - Warm

Freshwater Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with all beneficial uses except Water Quality Criterion: MAR, WARM, and COLD, the WQO for Dissolved Oxygen is 7.0 (minimum)

mg/L. The annual mean concentration is not to be less than this more than 10%

of the time.

Data Used to Assess Water Ouality:

Data were collected by the USGS every other month from 09/1998 to 09/1999. For all sampling dates, dissolved oxygen concentration decreased as the depth increased. For all sampling days except 01/07/1999, at least the top 4 meters had DO concentrations that met standards. For samples in 09/1998, standards were not met at depths greater than 4m. For 11/1998, standards were not met in water deeper than 10m. Standards were not met in 01/1999. Standards were met until the water reached 26m deep in 03/1999. In 05/1999, standards were not met in water deeper than 7m. Waters deeper than 5m did not meet standards in 07/1999 sampling. In 09/1999, waters deeper than 8m did not meet standards (USGS, 2002).

Spatial Representation:

Samples were collected at Loveland Reservoir near the dam. Samples were collected at depths of 0.1m to 50m.

Temporal Representation:

Samples were collected on one day, every other month from 09/10/1998 to 09/21/1999.

Data Quality Assessment:

USGS:http://water.usgs.gov/owq/FieldManual/

QA/QC Equivalent:

Data is from USGS Water Quality Monitoring Study.

Numeric Line of Evidence

Pollutant-Water

Beneficial Use:

CO - Cold Freshwater Habitat, MU - Municipal & Domestic, WA - Warm Freshwater Habitat

Matrix:

Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters with all beneficial uses except MAR, WARM, and COLD, the WQO for Dissolved Oxygen is 7.0 (minimum) mg/L. The annual mean concentration is not to be less than this more than 10% of the time.

Data Used to Assess Water Quality:

Data were collected by the USGS every other month from 09/1998 to 07/1999. For all sampling days, the DO concentration decreased as the water depth increased. For all sampling days, the dissolved oxygen concentration met standards at more shallow depths, but not in deeper waters. For all days, the top at least 3 meters met standards. Overall, including all depths, 45 of 72 samples were in exceedance (USGS, 2002).

Spatial Representation:

Samples were collected at Loveland Reservoir at the east end near the source inlet. Samples were collected at depths of 0.1m to 18.0 m.

Temporal Representation:

Samples were collected on one day, every other month from 09/10/1998 to 07/13/1999.

Data Quality Assessment:

USGS:http://water.usgs.gov/owq/FieldManual/

Water Segment: Miramar Reservoir

Pollutant: Sulfates

Decision: List

Weight of Evidence:

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 21 samples exceeded the Basin Plan criteria, 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: IN - Industrial Service Supply, MU - Municipal & Domestic, PO - Hydroelectric

Power Generation, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Sulfate is 250 mg/L. This concentration is not to be exceeded more than 10%

of the time during any one year period.

Data Used to Assess Water Data were collected by the City of San Diego Water Dept. from 1996 to 2000.

Quality: Two of 21 samples were in exceedance.

Spatial Representation: Samples were collected at Miramar Reservoir station MMA-0.

Temporal Representation: Samples were collected on a quarterly basis from 01/17/1996 to 12/05/2000.

Miramar Reservoir **Water Segment:**

Total Dissolved Solids **Pollutant:**

Decision: List

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

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 13 samples exceeded the Basin Plan criteria, and these exceed 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: IN - Industrial Service Supply, MU - Municipal & Domestic, PO - Hydroelectric

> Power Generation, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters and all beneficial uses, the WQO Water Quality Criterion:

for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of

the time during any one year period.

Data Used to Assess Water Data were collected by the City of San Diego Water Dept. from 1998 to 2001. Quality: Seven of the 13 samples were in exceedance.

Spatial Representation: Samples were collected at Miramar Reservoir station MMA-0.

Temporal Representation: Samples were collected on a quarterly basis from 09/01/1998 to 07/10/2001.

Water Segment: Morena Reservoir

Pollutant: Color

Decision: List

Weight of Evidence: 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 20 samples exceeded the Basin Plan criteria, and these exceed 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-Nuisance

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From Basin Plan: For inland surface waters with a municipal beneficial use, the

WQO for color is 15 units.

Data Used to Assess Water

Quality:

Data was collected at site MOA-0 by the City of San Diego Water Dept. between March 19996 and December 2000. Eleven of 20 samples were in

exceedance.

Spatial Representation: Samples were collected at site MOA-0.

Temporal Representation: Samples were collected on a quarterly basis between March 1996 and December

2000.

Water Segment: Morena Reservoir

Pollutant: Manganese

Decision: List

Weight of Evidence: 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 19 samples exceeded the Basin Plan's water quality objective and all five years had exceedances of 0.05 mg/L more than 10% of the time. 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, CO - Cold Freshwater Habitat, FR - Freshwater

Replenishment, IN - Industrial Service Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, 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 water quality objective for manganese in Morena Reservoir is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water

Quality Objectives. This concentration is not be exceeded more than 10% of the

time during any one year period.

Data Used to Assess Water

Quality:

Data was collected at site MOA-0 by the City of San Diego Water Dept. between January 1996 and September 2000. Five of 19 samples were in

exceedance and all five years had exceedances of 0.05 mg/L more than 10% of

the time.

Spatial Representation: Samples were collected at site MOA-0.

Temporal Representation: Samples were collected on a quarterly basis between January 1996 and

September 2000.

Morena Reservoir **Water Segment:**

Pollutant: pH (high)

Decision: List

Weight of Evidence: 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 19 samples exceeded the Basin Plan criteria, and these exceed 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, CO - Cold Freshwater Habitat, FR - Freshwater

> Replenishment, IN - Industrial Service Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, 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:

From the Basin Plan: For inland surface waters with all beneficial uses, the

WOO for pH is 6.5 (minimum) to 8.5 (maximum).

Data Used to Assess Water

Quality:

Data was collected at site MOA-0 by the City of San Diego Water Dept. between March 1996 and December 2000. Ten of 19 samples were in

exceedance.

Spatial Representation: Samples were collected at site MOA-0.

Samples were collected on a quarterly basis between March 1996 and December Temporal Representation:

2000.

Data used in 2002 assessment. QA/QC Equivalent:

Water Segment: Murray Reservoir

Pollutant: Total Dissolved Solids

Decision: List

Weight of Evidence: Based on th

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. Forty-seven of 72 samples exceeded the Basin Plan criteria, 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: CO - Cold Freshwater Habitat, IN - Industrial Service Supply, MU - Municipal

& Domestic, PO - Hydroelectric Power Generation, R1 - Water Contact

Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of

the time during any one year period.

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept in 09/1997. None of

the 3 samples were in exceedance.

Spatial Representation: Samples were collected in the Murray Watershed, MURDS drainage, station

MBP5.

Temporal Representation: Samples were collected on 09/25/1997 at 13:41.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, IN - Industrial Service Supply, MU - Municipal

& Domestic, PO - Hydroelectric Power Generation, R1 - Water Contact

Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Water Matrix:

Water Quality Objective/ Water Quality Criterion:

From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of

the time during any one year period.

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. in 05/1997. Six of 6

samples were in exceedance.

Spatial Representation: Samples were collected at the Murray watershed, drainage MURDS, station

MUR1A.

Temporal Representation: Samples were collected on 05/28/1997 from 7:35am to 7:42am.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, IN - Industrial Service Supply, MU - Municipal

& Domestic, PO - Hydroelectric Power Generation, R1 - Water Contact

Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/

Water Quality Criterion:

From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of

the time during any one year period.

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. in 09/1997. None of

the 3 samples were in exceedance.

Spatial Representation: Samples were collected in the Murray watershed, drainage MURDS, station

MUR1B.

Temporal Representation: Samples were collected on 09/25/1997 at 12:28pm.

Numeric Line of Evidence Pollutant-Water

CO - Cold Freshwater Habitat, IN - Industrial Service Supply, MU - Municipal Beneficial Use:

> & Domestic, PO - Hydroelectric Power Generation, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters and all beneficial uses, the WQO Water Quality Criterion: for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of

the time during any one year period.

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. in 03/1997 and 05/1997. Nine of 9 samples were in exceedance. Two of 2 averages were in exceedance (when averages are calculated for each the samples collected on

each sampling day).

Samples were collected in the Murray Watershed, drainage MURDS, station Spatial Representation:

MUR4A.

Temporal Representation: Samples were collected on 03/12/1997 at 13:54 and 13:55 and on 05/28/1997

from 8:03am to 8:08am.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, IN - Industrial Service Supply, MU - Municipal

> & Domestic, PO - Hydroelectric Power Generation, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters and all beneficial uses, the WQO Water Quality Criterion:

for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of

the time during any one year period.

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. in 09/1997 and

01/1998. None of the 6 samples were in exceedance.

Spatial Representation: Samples were collected in the Murray watershed, drainage MURDS, station

MUR5B.

Temporal Representation: Samples were collected on 09/25/1997 at 12:58 pm and 01/29/1998 at 15:13-

15:16pm.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, IN - Industrial Service Supply, MU - Municipal

& Domestic, PO - Hydroelectric Power Generation, R1 - Water Contact

Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters and all beneficial uses, the WQO

Water Quality Criterion: for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of

the time during any one year period.

Data Used to Assess Water Data were collected

Quality:

Data were collected by the City of San Diego Water Dept. in 03/1997 and 05/1997. Ten of 10 samples were in exceedance. Two of 2 averages were in exceedance (where averages were calculated for all samples collected each day.

For 2 sampling days, 1 average was calculated for each day).

Spatial Representation: Samples were collected in the Murray watershed, drainage MURDS, station

MUR7.

Temporal Representation: Samples were collected on 03/12/1997 at 14:47 and 14:48pm and 05/28/1997 at

8:41-8:48am.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, IN - Industrial Service Supply, MU - Municipal

& Domestic, PO - Hydroelectric Power Generation, R1 - Water Contact

Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters and all beneficial uses, the WQO Water Quality Criterion: for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of

the time during any one year period.

Data Used to Assess Water Data were collected by the City of San Diego Water Dept. in 09/1997 to

Quality: 02/1998. Fourteen of 20 samples were in exceedance. Samples collected on

09/18/1997, 12/10/1997, and 02/04/1998 were in exceedance and those collected

on other days were not.

Spatial Representation: Samples were collected in the Murray Watershed, drainage MURDS, station

MUR8b.

Temporal Representation: Samples were collected on 09/18/1997 from 12:50 to 13:46pm and on

09/25/1997 at 13:17 and 13:18pm. Samples were also collected 3-6 times within

10 minutes on 12/10/1997, 01/29/1998, and 02/04/1998.

Numeric Line of Evidence Pollutant-Water

CO - Cold Freshwater Habitat, IN - Industrial Service Supply, MU - Municipal Beneficial Use:

& Domestic, PO - Hydroelectric Power Generation, R1 - Water Contact

Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters and all beneficial uses, the WQO Water Quality Criterion:

for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of

the time during any one year period.

Data Used to Assess Water

Ouality:

Data were collected by the City of San Diego Water Dept. in 1998. Five of 8

samples (1 of 2 averages) were in exceedance.

Spatial Representation: Samples were collected at Murray Reservoir sites 2a and 2b.

Temporal Representation: Samples were collected on 01/29/1998 and 02/04/1998 3-5 times within 5

minutes.

Numeric Line of Evidence Pollutant-Water

CO - Cold Freshwater Habitat, IN - Industrial Service Supply, MU - Municipal Beneficial Use:

& Domestic, PO - Hydroelectric Power Generation, R1 - Water Contact

Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters and all beneficial uses, the WQO

Water Quality Criterion: for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of

the time during any one year period.

Data Used to Assess Water Data were collected by the City of San Diego Water Dept. from 1998 to 2000. Quality: Three of 7 samples were in exceedance.

Spatial Representation: Samples were collected at Murray Reservoir site MUA-0.

Temporal Representation: Samples were collected 1-4 times per year from 09/1998 to 12/2000.

Murray Reservoir **Water Segment:**

Pollutant: pН

Decision: List

Weight of Evidence:

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 78 samples exceeded the Basin Plan criteria, 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: CO - Cold Freshwater Habitat, IN - Industrial Service Supply, MU - Municipal

& Domestic, PO - Hydroelectric Power Generation, R1 - Water Contact

Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters and all beneficial uses, the WQO

Water Quality Criterion: for pH is 6.5 (maximum) to 8.5 (minimum).

Data Used to Assess Water Data were collected by the City of San Diego Water Dept. in 09/1997. None of *Quality:* the 3 samples were in exceedance.

Spatial Representation: Samples were collected at Murray watershed, drainage MURDS, station MBP5.

Temporal Representation: Samples were collected on 09/25/1997 at 13:41.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, IN - Industrial Service Supply, MU - Municipal

& Domestic, PO - Hydroelectric Power Generation, R1 - Water Contact

Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/

Water Quality Criterion: for pH is 6.5 (maximum) to 8.5 (minimum).

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. in 05/1997. None of

From the Basin Plan: For inland surface waters and all beneficial uses, the WQO

the 6 samples were in exceedance.

Spatial Representation: Samples were collected at Murray watershed, drainage MURDS, station

MUR1A.

Temporal Representation: Samples were collected on 05/28/1997 from 07:35am to 07:42am.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, IN - Industrial Service Supply, MU - Municipal

& Domestic, PO - Hydroelectric Power Generation, R1 - Water Contact

Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/

Water Quality Criterion:

From the Basin Plan: For inland surface waters and all beneficial uses, the WQO

for pH is 6.5 (maximum) to 8.5 (minimum).

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. in 09/1997. None of

the 3 samples were in exceedance.

Spatial Representation: Samples were collected at the Murray watershed, drainage MURDS, station

MUR1B.

Temporal Representation: Samples were collected on 09/26/1997 at 12:28pm.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, IN - Industrial Service Supply, MU - Municipal

& Domestic, PO - Hydroelectric Power Generation, R1 - Water Contact

Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO

for pH is 6.5 (maximum) to 8.5 (minimum).

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. in 03/1997 and

05/1997. None of the 9 samples were in exceedance.

Spatial Representation: Samples were collected in the Murray Watershed, drainage MURDS, station

MUR4A.

Temporal Representation: Samples were collected on 03/12/1997 at 13:54 and 13:55 and 05/28/1997 from

8:03am to 8:08am.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, IN - Industrial Service Supply, MU - Municipal

& Domestic, PO - Hydroelectric Power Generation, R1 - Water Contact

Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO

for pH is 6.5 (maximum) to 8.5 (minimum).

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. on 09/25/1997 and

01/29/1998. None of the 6 samples were in exceedance.

Spatial Representation: Samples were collected in the Murray Watershed, drainage MURDS, station

MUR5B.

Temporal Representation: Samples were collected on 09/25/1997 at 12:58pm and on 01/29/1998 from

15:13-15:16pm.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, IN - Industrial Service Supply, MU - Municipal

& Domestic, PO - Hydroelectric Power Generation, R1 - Water Contact

Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO

for pH is 6.5 (maximum) to 8.5 (minimum).

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. in 03/1997 and

05/1997. Three of 10 samples were in exceedance.

Spatial Representation: Samples were collected in the Murray Watershed, drainage MURDS, station

MUR7.

Temporal Representation: Samples were collected on 03/12/1997 at 14:47 and 14:48pm and on 05/28/1997

at 8:41-8:48pm.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, IN - Industrial Service Supply, MU - Municipal

& Domestic, PO - Hydroelectric Power Generation, R1 - Water Contact

Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO

for pH is 6.5 (maximum) to 8.5 (minimum).

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. from 09/1997 to 02/1998. Ten of 25 samples were in exceedance. The samples collected in

09/18/1997 and in 01/1998 were in exceedance, but those collected on all other

days met standards.

Spatial Representation: Samples were collected in Murray Watershed, drainage MURDS, station

MUR8b.

Temporal Representation: Samples were collected on 09/18/1997 and 09/25/1997. Samples were also

collected on 12/10/1997, 01/29/1998, and 02/04/1998.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, IN - Industrial Service Supply, MU - Municipal

& Domestic, PO - Hydroelectric Power Generation, R1 - Water Contact

Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO

for pH is 6.5 (maximum) to 8.5 (minimum).

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. in 1998. None of the

8 samples were in exceedance.

Spatial Representation: Samples were collected at Murray Reservoir stations 2a and 2b.

Temporal Representation: Samples were collected on 01/29/1998 and on 02/04/1998. On each day, 3-5

samples were collected within 5 minutes.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, IN - Industrial Service Supply, MU - Municipal

& Domestic, PO - Hydroelectric Power Generation, R1 - Water Contact

Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO

for pH is 6.5 (maximum) to 8.5 (minimum).

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. from 1996 to 2000.

One of 18 samples was in exceedance.

Spatial Representation: Samples were collected at Murray Reservoir site MUA-0.

Temporal Representation: Samples were collected 2-4 times per year from 03/1996 to 12/2000.

Water Segment: Murrieta Creek

Pollutant: Arsenic

Decision: List

Weight of Evidence: 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 13 samples exceeded the Basin Plan criteria, 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: From the Basin Plan: For all waters with a municipal beneficial use, the WQO

for Arsenic is 0.05 mg/L.

Data Used to Assess Water

Quality:

Data were collected by the RWQCB on 06/09/1998. One sample was collected,

it was in exceedance.

Samples were collected at Murrieta Creek at Calle Del Oso Rd.

Temporal Representation: One sample was collected on 06/09/1998.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ From the Basin Plan: For all waters with a municipal beneficial use, the WQO

Water Quality Criterion: for Arsenic is 0.05 mg/L.

Data Used to Assess Water Data were collected by the RWQCB on 06/09/1998. One sample was collected,

Quality: it was in exceedance.

Samples were collected at Murrieta Creek behind the cement factory.

Temporal Representation: One sample was collected on 06/09/1998.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ From the Basin Plan: For all waters with a municipal beneficial use, the WQO

Water Quality Criterion: for Arsenic is 0.05 mg/L.

Data Used to Assess Water Data were collected by LAW Crandall from 1997 to 2000. None of the 11

Quality: samples were in exceedance.

Spatial Representation: Samples were collected at Murrieta Creek at Temecula. Exact location was not

reported.

Temporal Representation: Samples were collected from 12/09/1997 to 06/01/2000. One to 4 samples were

collected per year. One to 2 samples were reported per sampling day.

Murrieta Creek **Water Segment:**

Pollutant: Copper

Decision: List

Weight of Evidence: 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 13 samples exceeded the Basin Plan criteria, 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:

From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Copper is 1.0 mg/L.

Data Used to Assess Water

Quality:

Data were collected by RWQCB9 on 06/09/1998. One sample was collected, it was in exceedance.

Spatial Representation: Sample was collected at Murrieta Creek at Calle Del Oso Rd. Temporal Representation: One sample was collected on 06/09/1998.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with a municipal beneficial use,

Water Quality Criterion: the WQO for Copper is 1.0 mg/L.

Data Used to Assess Water Data were collected by RWQCB9 on 06/09/1998. One sample was collected, it

Quality: was in exceedance.

Spatial Representation: Sample was collected at Murrieta Creek behind the cement factory.

Temporal Representation: One sample was collected on 06/09/1998.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with a municipal beneficial use,

Water Quality Criterion: the WQO for Copper is 1.0 mg/L.

Data Used to Assess Water Data were collected by LAW Crandall from 1997 to 2000. None of the 11

Quality: samples were in exceedance.

Spatial Representation: Sample was collected at Murrieta Creek. Exact location was not reported.

Temporal Representation: Samples were collected from 12/09/1997 to 06/01/2000. One to 4 samples were

collected per year. One to 2 samples were reported per sampling day.

Water Segment: Murrieta Creek

Pollutant: Iron

Decision: List

Weight of Evidence: 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 11 samples exceeded the Basin Plan criteria, 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: From the Basin Plan: For inland surface waters with a municipal beneficial use,

the WQO for iron is 0.3 mg/L.

Data Used to Assess Water

Quality:

Data were collected by LAW Crandall from 1997 to 2000. Five of 11 samples were in exceedance.

Spatial Representation: Samples were collected at Murrieta Creek. Exact location was not given.

Samples were collected from 12/09/1997 to 06/01/2000. One to 4 samples were collected per year. One to 2 samples were reported per sampling day. Temporal Representation:

Water Segment: Murrieta Creek

Pollutant: Manganese

Decision: List

Weight of Evidence: 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 11 samples exceeded the Basin Plan criteria and the criteria was exceeded more than 10% of the time during at least two years. 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: The water quality objective for manganese in Murrieta Creek is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not be exceeded more than 10% of the

time during any one year period.

Data Used to Assess Water Data were collected by LAW Crandall from 1997 to 2000. Seven of 11 samples

Quality: were in exceedance.

Samples were collected at Murrieta Creek. Exact location was not reported.

Temporal Representation: Samples were collected from 12/09/1997 to 06/01/2000. One to 4 samples were

collected per year. One to 2 samples were reported per sampling day.

Water Segment: Murrieta Creek

Pollutant: Nitrogen

Decision: List

Weight of Evidence: 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-nine of 164 samples exceeded the Basin Plan criteria 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, GW - Groundwater Recharge, IN - Industrial Service

Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm

From the Basin Plan: For inland surface waters, enclosed bays and estuaries,

Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

on: coastal lagoons, and ground waters and all beneficial uses, for Nitrogen, analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and

monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to

weight basis shall be used.

Data Used to Assess Water

Quality:

Data were collected by the Rancho California Water District from 1999 to 2002. The N:P ratio was used to assess data. Thirty-nine of 160 samples exceeded the

10:1 ratio.

Spatial Representation: Samples were collected at Murrieta Creek. Exact location was not reported.

Temporal Representation: Samples were collected 4 times per month from 03/31/1999 to 04/17/2002.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, GW - Groundwater Recharge, IN - Industrial Service

Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm

Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters, enclosed bays and estuaries, coastal lagoons, and ground waters for all beneficial uses, analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P=10:1, on a weight to weight basis

shall be used.

Data Used to Assess Water

Quality:

Data were collected by LAW Crandall from 1997 to 1999. Four N:P ratios were calculated, according to days on which both Nitrogen and Phosphorus samples were collected. None of the 4 ratios were in exceedance of the 10:1 N:P ratio

(SWRCB, 2003).

Spatial Representation: Samples were collected at Murrieta Creek. Exact location was not given.

Temporal Representation: Samples were collected from 12/09/1997 to 12/06/1999. One to 4 samples were

collected per year. One sample was reported per sampling day.

Water Segment: Murrieta Creek

Pollutant: Zinc

Decision: List

Weight of Evidence: 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 13 samples exceeded the Basin Plan criteria, 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: From the Basin Plan: For inland surface waters with a municipal beneficial use,

the WQO for zinc is 5.0 mg/L.

Data Used to Assess Water

Quality:

Data were collected by RWQCB9 on 06/09/1998. One sample was collected, it

was in exceedance.

Spatial Representation: Samples were collected at Murrieta Creek at Calle Del Oso Rd.

Temporal Representation: One sample was collected on 06/09/1998.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with a municipal beneficial use,

Water Quality Criterion: the WQO for zinc is 5.0 mg/L.

Data Used to Assess Water Data were collected by RWQCB9 on 06/09/1998. One sample was collected, it

Quality: was in exceedance.

Samples were collected at Murrieta Creek behind the cement factory.

Temporal Representation: One sample was collected on 06/09/1998.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with a municipal beneficial use,

Water Quality Criterion: the WQO for zinc is 5.0 mg/L.

Data Used to Assess Water Data were collected by LAW Crandall from 1997 to 2000. None of the 11

Quality: samples were in exceedance.

Spatial Representation: Samples were collected at Murrieta Creek. Exact location was not given.

Temporal Representation: Samples were collected from 12/09/1997 to 06/01/2000. One to 4 samples were

collected per year. One sample was reported per sampling day.

Water Segment: Oso Creek (at Mission Viejo Golf Course)

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 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 13 samples were in exceedance of the 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/ From the Basin Plan: For inland surface waters and all beneficial uses, the WQO

for Chloride is 250 mg/L. This concentration is not to be exceeded more than

Water Quality Criterion: 10% of the time during any one year period.

Data Used to Assess Water

Quality:

Data were collected by the Santa Margarita Water District in 1998-2001. Twelve

of 13 samples were in exceedance.

Spatial Representation: Samples were collected at Oso Creek at the Mission Valley Golf Course.

Temporal Representation: Samples were collected on a quarterly basis from 01/15/1998 to 01/02/2001.

Water Segment: Oso Creek (at Mission Viejo Golf Course)

Pollutant: Sulfates

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. Twelve of 13 samples were in exceedance of the WQO for Sulfate 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, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA -

Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters and all beneficial uses, the WQO Water Quality Criterion: for Sulfate 250 mg/L. This concentration is not to be exceeded more than 10% of

the time during any one year period.

Data Used to Assess Water

Quality:

Data were collected by the Santa Margarita Water District from 1998 to 2001.

Twelve of 13 samples were in exceedance.

Spatial Representation: Samples were collected at Oso Creek at the Mission Viejo Golf Course.

Temporal Representation: Samples were collected on a quarterly basis from 01/15/1998 to 01/02/2001.

Water Segment: Oso Creek (at Mission Viejo Golf Course)

Pollutant: Total Dissolved Solids

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. Twelve of 13 samples were in exceedance of the TDS 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, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA -

Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters in HSA 901.21, and all Water Quality Criterion:

beneficial uses, the WQO for TDS is 750 mg/L. This concentration is not to be

exceeded more than 10% of the time during any one year period.

Evaluation Guideline: These objectives apply to the lower portion of Murrieta Creek in the Wolf HSA

(2.52) and the Santa Margarita River from its beginning at the confluence of Murrieta and Temecula Creeks, through the Gavilan HSA (2.22) and DeLuz

HSA (2.21), to where it enters the Upper Ysidora HSA (2.13).

Data Used to Assess Water

Quality:

Data were collected by the Santa Margarita Water District in 1998-2001. Twelve

of 13 samples were in exceedance.

Spatial Representation: Samples were collected at Oso Creek at the Mission Viejo Golf Course.

Temporal Representation: Samples were collected on a quarterly basis from 01/15/1998 to 01/02/2001.

Water Segment: Otay Reservoir, Lower

Pollutant: Color

Decision: List

Weight of Evidence: 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 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. There were 223 out of 423 samples that exceeded the Basin Plan water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing

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 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: From the Basin Plan: The WQO for color in inland surface waters with a

municipal beneficial use is 15 units.

Data Used to Assess Water

Quality:

Color data was collected at sample site OTA-0 by the City of San Diego Water. Dept. from March 1996 to December 2000. For the MUN beneficial use, there

were 223 out of 423 samples in exceedance.

Spatial Representation: Samples were collected at sample site OTA-0 in the Lower Otay Reservoir near

the outlet tower. Samples were collected at the water's surface and at depths of 106 ft., 117ft., 84ft., and 95ft. above the stream bed. Depth samples were also collected near the outlet tower.

Temporal Representation: Samples were collected on a quarterly basis from January 1996 to December

2000.

Water Segment: Otay Reservoir, Lower

Pollutant: Iron

Decision: List

Weight of Evidence:

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. Forty-four of 103 samples exceeded the Basin Plan criteria, 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: From the Basin Plan: The WQO for iron for inland surface waters with a

municipal beneficial use is 0.3 mg/L.

Data Used to Assess Water

Quality:

Iron data was collected by the City of San Diego Water Dept. at site OTA-0 from January 1996 to July 2001. Of 103 samples, 44 were in exceedance.

Spatial Representation: Samples were collected at site OTA-0 in the Lower Otay reservoir near the

outlet tower. Samples were collected at the water's surface and at depths of 106

ft., 117ft., 84ft., and 95ft. above the stream bed. Depth samples were also collected near the outlet tower.

Temporal Representation: Samples were collected from January 1996 to July 2001. Samples were collected

monthly.

Water Segment: Otay Reservoir, Lower

Pollutant: Manganese

Decision: List

Weight of Evidence: 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 26 samples exceeded the Basin Plan criteria and the criteria was exceeded more than 10% of the time during 4 of the years. 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: The water quality objective for manganese in Lower Otay Reservoir is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not be exceeded more than 10% of the

time during any one year period.

Data Used to Assess Water

Quality:

Manganese data was collected at site OTA-0 by the City of San Diego Water Dept. from January 1996 to June 2001. Nine of 26 samples were in exceedance

and the criteria was exceeded more than 10% of the time on 4 of the years.

Samples were collected at sample site OTA-0 in the Lower Otay Reservoir near

the outlet tower. Samples were collected at the water's surface and at depths of 106 ft., 117ft., 84ft., and 95ft. above the stream bed. Depth samples were also

collected near the outlet tower.

Temporal Representation: Samples were collected on a quarterly basis from January 1996 to June 2001.

Water Segment: Otay Reservoir, Lower

Pollutant: Nitrogen, ammonia (Total Ammonia)

Decision: List

Weight of Evidence: 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.

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 104 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 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 Pollutant-Water

Beneficial Use: AG - Agricultural Supply, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm

Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: 0.025 mg/L

Data Used to Assess Water

Quality:

Data was collected by the City of San Diego Water Dept. from December 1996

to July 2001. Fifty-six of 104 samples are in exceedance.

Samples were collected from one location in the reservoir labeled OTA-0 in Lower Otay Reservoir near the outlet tower. Spatial Representation:

Samples were collected from December 1996 to July 2001. Samples were Temporal Representation:

collected monthly.

Water Segment: Otay Reservoir, Lower

Pollutant: pH (high)

Decision: List

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

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 24 samples had a pH higher than 8.5 (exceeding the Bain Plan criteria).

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-Water Numeric Line of Evidence

AG - Agricultural Supply, CO - Cold Freshwater Habitat, IN - Industrial Service Beneficial Use:

> Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 -Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm

Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with all beneficial uses, the

Water Quality Criterion: WQO for pH is 6.5 (minimum) to 8.5 (maximum).

Data Used to Assess Water pH data was collected at site OTA-0 by the City of San Diego Water Dept. from

March 1996 to December 2000. Ten of 24 samples exceeded 8.5 pH units. None Quality:

of 24 samples were below 6.5 pH units.

Samples were collected at site OTA-0 in the Lower Otay Reservoir near the

outlet tower. Samples were collected at the water's surface and at depths of 106 ft., 117ft., 84ft., and 95ft. above the stream bed. Depth samples were also

collected near the outlet tower.

Temporal Representation: Samples were collected on a quarterly basis from March 1996 to December

2000.

Pine Valley Creek (Upper) **Water Segment:**

Phosphorus **Pollutant:**

Decision: List

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

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 quantity requirements of section 6.1.5 of the Policy.

2. Six of 51 samples exceeded the Basin Plan criteria, and these exceed the allowable

frequency listed in Table 3.1 of the Listing Policy.

3. 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, CO - Cold Freshwater Habitat, FR - Freshwater

> Replenishment, IN - Industrial Service Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact

Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/

From the Basin Plan: For inland surface waters-streams and other flowing waters Water Quality Criterion: and for all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This

appears to be the desired goal in order to prevent plant nuisance in streams and

other flowing waters; not to be exceeded more than 10% of the time.

Evaluation Guideline: Use unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board.

Certain exceptions to these objectives are described in Chapter 4 of the Basin Plan in the sections titled "Discharges to Coastal Lagoons from Pilot Water Reclamation Projects" and "Discharges to Inland Surface Waters".

Data Used to Assess Water

Quality:

Phosphorus data was collected at 5 sample sites by the City of San Diego Water Dept. from 1/14/1998 to 8/18/1998. At site NPC3A, 1 of 10 samples was in

exceedance.

Spatial Representation: Samples for this LOE were collected at site NPC3A in Pine Valley Creek. The

exact location of this site is unknown. Samples were collected at 4 more sample

sites in Pine Valley Creek.

Temporal Representation: Samples were collected monthly from January 14, 1998 to August 18, 1998.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pol

Pollutant-Water

Beneficial Use: AG - Agricultural Supply, CO - Cold Freshwater Habitat, FR - Freshwater

Replenishment, IN - Industrial Service Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact

Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters-streams and other flowing waters and for all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be the desired goal in order to prevent plant nuisance in streams and

other flowing waters; not to be exceeded more than 10% of the time.

Evaluation Guideline: Use unless studies of the specific water body in question clearly show that water

quality objective changes are permissible and changes are approved by the

Regional Board.

Data Used to Assess Water

Quality:

Phosphorus data was collected at 5 sample sites by the City of San Diego Water Dept. from 1/14/1998 to 8/18/1998. At site NPC3B, 2 of 10 samples were in

exceedance (SWRCB, 2003).

Spatial Representation: Phosphorus samples for this LOE were collected at site NPC3B. The exact

location of this site is unknown. Samples were collected at 4 other sample sites

in Pine Valley Creek. The proximity of the sites to each other is unknown.

Temporal Representation: Samples were collected monthly from 1/14/1998 to 8/18/1998.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, CO - Cold Freshwater Habitat, FR - Freshwater

Replenishment, IN - Industrial Service Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact

Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters-streams and other flowing waters Water Quality Criterion: and for all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This

and for all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be the desired goal in order to prevent plant nuisance in streams and

other flowing waters; not to be exceeded more than 10% of the time.

Evaluation Guideline: Use unless studies of the specific water body in question clearly show that water

quality objective changes are permissible and changes are approved by the

Regional Board.

Data Used to Assess Water

Quality:

Phosphorus data was collected at 5 sample sites by the City of San Diego Water

Dept. from 1/14/1998 to 8/18/1998. At site NPC3C, 0 of 10 samples were in

exceedance.

Spatial Representation: Phosphorus samples for this LOE were collected at site NPC3C. The exact

location of this site is unknown. Samples were collected at 4 other sample sites in Pine Valley Creek. The proximity of the sites to each other is unknown.

Temporal Representation: Samples were collected on a monthly basis from 1/14/1998 to 8/18/1998.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, CO - Cold Freshwater Habitat, FR - Freshwater

Replenishment, IN - Industrial Service Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact

Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters-streams and other flowing waters Water Quality Criterion: and for all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This

and for all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be the desired goal in order to prevent plant nuisance in streams and

other flowing waters; not to be exceeded more than 10% of the time.

Evaluation Guideline: Use unless studies of the specific water body in question clearly show that water

quality objective changes are permissible and changes are approved by the

Regional Board.

Data Used to Assess Water

Quality:

Phosphorus data was collected at 5 sample sites by the City of San Diego Water Dept. from 1/14/1998 to 8/18/1998. At site NPC3D, 1 of 10 samples were in

exceedance.

Spatial Representation: Phosphorus samples for this LOE were collected at site NPC3D. The exact

> location of this site is unknown. Samples were collected at 4 other sample sites in Pine Valley Creek. The proximity of the sites to each other is unknown.

Samples were collected on a monthly basis from 1/14/1998 to 8/18/1998. *Temporal Representation:*

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, CO - Cold Freshwater Habitat, FR - Freshwater

> Replenishment, IN - Industrial Service Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact

Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters-streams and other flowing waters

> and for all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be the desired goal in order to prevent plant nuisance in streams and

other flowing waters; not to be exceeded more than 10% of the time.

Use unless studies of the specific water body in question clearly show that water Evaluation Guideline:

quality objective changes are permissible and changes are approved by the

Regional Board.

Data Used to Assess Water

Water Quality Criterion:

Quality:

Phosphorus data was collected at 5 sample sites by the City of San Diego Water

Dept. from 1/14/1998 to 9/15/1998. At site PVC1A, 2 of 11 samples were in

exceedance.

Phosphorus samples for this LOE were collected at site PVC1A. The exact Spatial Representation:

> location of this site is unknown. Samples were collected at 4 other sample sites in Pine Valley Creek. The proximity of the sites to each other is unknown.

Temporal Representation: Samples were collected on a monthly basis from 1/14/1998 to 9/15/1998.

Data used in 2002 assessment. QA/QC Equivalent:

Water Segment: Pine Valley Creek (Upper)

Pollutant: Turbidity

Decision: List

Weight of Evidence: 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 quantity requirements of section 6.1.5 of the Policy.

2. Eleven of 53 samples exceeded the Basin Plan criteria, and these exceed the

allowable frequency listed in Table 3.2 of the Listing Policy.

3. 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: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5 units. For inland surface waters and all other

beneficial uses, the WQO for turbidity is 20 ntu.

Data Used to Assess Water

Quality:

Samples were collected at site NPC3A by the City of San Diego Water Dept.

from 1/14/1998 to 8/18/1998. Of 10 samples, 1 exceeded the WQO for

municipal beneficial uses.

Spatial Representation: Samples were collected at site NPC3A. The exact location of this site is

unknown. Samples were collected at 4 other sites in the creek. The proximity of

these sites to each other is unknown.

Temporal Representation: Samples were collected monthly between 1/14/1998 and 8/18/1998.

Data used in 2002 assessment. QA/QC Equivalent:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5 units. For inland surface waters and all other

beneficial uses, the WQO for turbidity is 20 ntu.

Data Used to Assess Water

Quality:

Samples were collected at site NPC3B by the City of San Diego Water Dept.

from 1/14/1998 to 8/18/1998. Of 10 samples, 1 exceeded the WQO for

municipal beneficial uses (SWRCB, 2003).

Samples were collected at site NPC3B. The exact location of this site is Spatial Representation:

unknown. Samples were collected at 4 other sites in the creek. The proximity of

these sites to each other is unknown.

Temporal Representation: Samples were collected monthly between 1/14/1998 and 8/18/1998.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Water

MU - Municipal & Domestic Beneficial Use:

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

From the Basin Plan: For inland surface waters with a municipal beneficial use,

the WQO for turbidity is 5 units. For inland surface waters and all other

beneficial uses, the WQO for turbidity is 20 ntu.

Data Used to Assess Water

Quality:

Samples were collected at site NPC3C by the City of San Diego Water Dept.

from 1/14/1998 to 8/18/1998. Of 10 samples, 2 exceeded the WQO for

municipal beneficial uses.

Spatial Representation: Samples were collected at site NPC3C. The exact location of this site is unknown. Samples were collected at 4 other sites in the creek. The proximity of

these sites to each other is unknown.

Temporal Representation: Samples were collected monthly between 1/14/1998 to 8/18/1998.

Data used in 2002 assessment. QA/QC Equivalent:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5 units. For inland surface waters and all other

beneficial uses, the WQO for turbidity is 20 ntu.

Data Used to Assess Water

Quality:

Samples were collected at site NPC3D by the City of San Diego Water Dept.

from 1/14/1998 to 7/14/1998. Of 9 samples, 4 exceeded the WQO for municipal

beneficial uses.

Samples were collected at site NPC3D. The exact location of this site is Spatial Representation:

unknown. Samples were collected at 4 other sites in the creek. The proximity of

these sites to each other is unknown.

Temporal Representation: Samples were collected monthly between 1/14/1998 and 7/14/1998.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Water

MU - Municipal & Domestic Beneficial Use:

Matrix: Water

Water Quality Objective/

From the Basin Plan: For inland surface waters with a municipal beneficial use, Water Quality Criterion:

the WQO for turbidity is 5 units. For inland surface waters and all other

beneficial uses, the WQO for turbidity is 20 ntu.

Data Used to Assess Water

Quality:

Samples were collected at site PVC1A by the City of San Diego Water Dept.

from 1/14/1998 to 9/15/1998. Of 11 samples, 3 exceeded the WQO for

municipal beneficial uses.

Spatial Representation: Samples were collected at site PVC1A. The exact location of this site is unknown. Samples were collected at 4 other sites in the creek. The proximity of

these sites to each other is unknown.

Temporal Representation: Samples were collected monthly between 1/14/1998 and 9/15/1998.

Data used in 2002 assessment. QA/QC Equivalent:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with a municipal beneficial use, Water Quality Criterion: the WQO for turbidity is 5 units. For inland surface waters with all other

beneficial uses, the WQO is 20 units.

Data Used to Assess Water Samples were collected at site PVC1A by the City of San Diego Water Dept. on

May 19, 1997 and October 9, 1997. Two samples were collected (one on each

day) and none were in exceedance.

Spatial Representation: Samples were collected at sample site PVC1A. Another sample was collected at

site PVC1B.

Samples were collected once on each day on May 19, 1997 and October 9, 1997. Temporal Representation:

Data used in 2002 assessment. *QA/QC Equivalent:*

Pollutant-Water Numeric Line of Evidence

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with a municipal beneficial use, Water Quality Criterion:

the WQO for turbidity is 5 units. For inland surface waters with all other

beneficial uses, the WQO is 20 units.

Data Used to Assess Water

Quality:

Quality:

One sample was collected at site PVC1B by the City of San Diego Water Dept.

on May 20, 1997. The single sample was not in exceedance.

The sample was collected at site PVC1B in Pine Valley Creek. Other samples Spatial Representation:

were collected at PVC1A.

Temporal Representation: One sample was collected on May 20, 1997.

QA/QC Equivalent: Data used in 2002 assessment.

Matrix:

Pogi Canyon Creek **Water Segment:** DDT **Pollutant: Decision:** List This pollutant is being considered for placement on the section 303(d) list under Weight of Evidence: 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 California Toxic Rule: DDT human health carcinogenic risk for consumption of water & organisms of 0.00059 ug/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. Two of the 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. After review of the available data and information, SWRCB staff concludes that the **SWRCB Staff** water body-pollutant combination should be placed on the section 303(d) list because **Recommendation:** applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. **Lines of Evidence:** Numeric Line of Evidence Pollutant-Water AG - Agricultural Supply, R1 - Water Contact Recreation, R2 - Non-Contact Beneficial Use: Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Water

Water Quality Objective/ No individual pesticide or combination or pesticides shall be present in Water Quality Criterion:

concentrations that adversely affect beneficial uses.

California Toxic Rule: DDT human health carcinogenic risk for consumption of

water & organisms 0.00059 ug/L.

Data Used to Assess Water

Quality:

Two of 3 sample exceeding CTR criterion (SWAMP, 2004).

One sampling station at Pogi Creek: 32.6 -117.02114. Spatial Representation:

Temporal Representation: Samples were collected from March through September of 2002.

Environmental Conditions: Otay River Watershed: 910.20.

Data Quality Assessment: SWAMP Quality Assurance Plan.

Water Segment: Rainbow Creek

Pollutant: Iron

Decision: List

Weight of Evidence: 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 11 samples exceeded the Basin Plan criteria, 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: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for iron is 0.3 mg/L.

Data Used to Assess Water

Quality:

Data were collected by RWQCB9 from 1997 to 2000. Two of 11 samples were in exceedance.

Spatial Representation: Samples were collected at Rainbow Creek near Fallbrook.

Temporal Representation: Samples were collected on a quarterly basis from 12/1997 to 06/2000.

QA/QC Equivalent: Data used in 2002 assessment.

Water Segment: Rainbow Creek

Pollutant: Sulfates

Decision: List

Weight of Evidence: Based on

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 11 samples exceeded the Basin Plan criteria, 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: AG - Agricultural Supply, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for sulfate is 250 mg/L. This concentration is not to be exceeded more than 10%

of the time during any one year period.

Data Used to Assess Water

Quality:

Data were collected by RWQCB9 from 1997 to 2000. Six of 11 samples were in

exceedance.

Spatial Representation: Samples were collected at Rainbow Creek near Fallbrook.

Temporal Representation: Samples were collected on a quarterly basis from 12/1997 to 06/2000.

QA/QC Equivalent: Data used in 2002 assessment.

Water Segment: Rainbow Creek

Pollutant: Total Dissolved Solids

Decision: List

Weight of Evidence: Base

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. Forty-nine of 51 samples exceeded the Basin Plan criteria, and these exceed 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, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters in HSA 902.22, and all beneficial uses, the WQO for TDS is 750 mg/L.

Evaluation Guideline: These objectives apply to the lower portion of Murrieta Creek in the Wolf HSA

(2.52) and the Santa Margarita River from its beginning at the confluence of Murrieta and Temecula Creeks, through the Gavilan HSA (2.22) and DeLuz

HSA (2.21), to where it enters the Upper Ysidora HSA (2.13).

Data Used to Assess Water

Quality:

Data were collected by RWQCB9 in 2000. Nine of 9 samples were in

exceedance.

Spatial Representation: Samples were collected at Rainbow Creek station 6, Stage Coach.

Temporal Representation: Samples were collected 2-4 times per month from 08/2000 to 10/2000.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters in HSA 902.22 and all beneficial

uses, the WQO for TDS is 500 mg/L.

Evaluation Guideline: These objectives apply to the lower portion of Murrieta Creek in the Wolf HSA

(2.52) and the Santa Margarita River from its beginning at the confluence of Murrieta and Temecula Creeks, through the Gavilan HSA (2.22) and DeLuz

HSA (2.21), to where it enters the Upper Ysidora HSA (2.13).

Data Used to Assess Water

Quality:

Data were collected from 1997 to 2000. Nine of 11 samples were in exceedance.

Spatial Representation: Samples were collected at Rainbow Creek near Fallbrook.

Temporal Representation: Samples were collected on a quarterly basis from 12/1997 to 06/2000.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-

Contact Recreation, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters in HSA 902.22, and all

Water Quality Criterion: beneficial uses, the WQO for TDS is 500 mg/L.

Evaluation Guideline: These objectives apply to the lower portion of Murrieta Creek in the Wolf HSA

(2.52) and the Santa Margarita River from its beginning at the confluence of Murrieta and Temecula Creeks, through the Gavilan HSA (2.22) and DeLuz

HSA (2.21), to where it enters the Upper Ysidora HSA (2.13).

Data Used to Assess Water

Quality:

Data were collected by RWQCB9 in 2000. Twenty of 20 samples were in exceedance. One sample was also collected by RWQCB9 on 06/09/1998. This

sample was in exceedance.

Samples were collected at Rainbow Creek station 4, Willow Glen.

Temporal Representation: Samples were collected 2-4 times per year from 03/2000 to 10/2000, and on

06/09/1998.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters in HSA 902.22, and all

beneficial uses, the WQO for TDS is 750 mg/L.

Evaluation Guideline: These objectives apply to the lower portion of Murrieta Creek in the Wolf HSA

(2.52) and the Santa Margarita River from its beginning at the confluence of Murrieta and Temecula Creeks, through the Gavilan HSA (2.22) and DeLuz

HSA (2.21), to where it enters the Upper Ysidora HSA (2.13).

Data Used to Assess Water

Quality:

Data were collected by RWQCB9 in 2000. Twenty of 20 samples were in

exceedance.

Spatial Representation: Samples were collected at Rainbow Creek at station 5, Riverhouse.

Temporal Representation: Samples were collected 2-4 times per month from 03/2000 to 10/2000.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters in HSA 902.22, and all

beneficial uses, the WQO for TDS is 750 mg/L.

Evaluation Guideline: These objectives apply to the lower portion of Murrieta Creek in the Wolf HSA

(2.52) and the Santa Margarita River from its beginning at the confluence of Murrieta and Temecula Creeks, through the Gavilan HSA (2.22) and DeLuz

HSA (2.21), to where it enters the Upper Ysidora HSA (2.13).

Data Used to Assess Water

Quality:

Data were collected by RWQCB9 in 2000. One sample was collected and was in

exceedance.

Spatial Representation: Samples were collected at Rainbow Creek at station 2, Hines Nurseries.

Temporal Representation: One sample was collected on 09/19/2000.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters in HSA 902.22, and all

Water Quality Criterion: beneficial uses, the WQO for TDS is 750 mg/L.

Evaluation Guideline: These objectives apply to the lower portion of Murrieta Creek in the Wolf HSA

(2.52) and the Santa Margarita River from its beginning at the confluence of Murrieta and Temecula Creeks, through the Gavilan HSA (2.22) and DeLuz

HSA (2.21), to where it enters the Upper Ysidora HSA (2.13).

Data Used to Assess Water Data were collected by RWQCB9 in 2000. Nine of 9 samples were in

Quality: exceedance.

Samples were collected in Rainbow Creek at station 3, Oak Crest.

Temporal Representation: Samples were collected 2-4 times per month from 08/2000 to 10/2000.

QA/QC Equivalent: Data used in 2002 assessment.

Reidy Canyon Creek **Water Segment:**

Phosphorus **Pollutant:**

Decision: List

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

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 Basin Plan criteria, and these exceed the allowable frequency 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-Water Numeric Line of Evidence

AG - Agricultural Supply, CO - Cold Freshwater Habitat, IN - Industrial Service Beneficial Use:

> Supply, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

From the Basin Plan, the WQO for Total Phosphorus for inland surface watersstreams and other flowing waters is 0.1 mg/L. This appears to be desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be

exceeded more than 10% of the time.

Data Used to Assess Water Data was collected on 3/12/2001 at Reidy Creek near Mountain Meadow Quality: Mushroom Farm at two locations; one upstream and one downstream. Samples

in exceedance: 2 of 2 (SDRWQCB, 2001).

Spatial Representation: Samples were collected at Reidy Creek near Mountain Meadow Mushroom

Farm at one upstream location and one downstream location.

Temporal Representation: One sample was taken at each location on one day, 3/12/2001.

Water Segment: Reidy Canyon Creek

Pollutant: Turbidity

Decision: List

Weight of Evidence:

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 Basin Plan criteria, and these exceed the allowable frequency 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, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan, the Turbidity WQO for inland surface water with Water Quality Criterion: Municipal (MUN) Beneficial Uses is 5 units.

The Turbidity WQO for inland surface waters with all other beneficial uses is 20

NTU. Waters shall be free of changes in turbidity that cause nuisance or

adversely affect beneficial uses.

Data Used to Assess Water Data was obtained from samples collected on 3/12/2001 in Reidy Creek near the

Mountain Meadow Mushroom Farm. One upstream sample and one downstream

sample were collected. For the MUN beneficial use, 2 of 2 samples are in

exceedance (SDRWQCB, 2001).

Spatial Representation: Two samples, one upstream and one downstream, were collected at Reidy Creek

near the Mountain Meadow Mushroom Farm.

Temporal Representation: Samples were collected once on 3/12/2001.

Quality:

Water Segment: San Diego Bay

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. Eleven 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: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: San Diego RWQCB Basin Plan: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human

health, wildlife or aquatic organisms.

Evaluation Guideline: 20 ng/g (OEHHA Screening Value) (Brodberg & Pollock, 1999).

Data Used to Assess Water

Quality:

Eleven out of 11 samples exceeded. All 11 samples were filet composites. Six out of the 11 samples were spotted sand bass collected at least once at each station. The remaining species included barred sand bass, black surfperch, diamond turbot, and shiner surfperch. All samples exceeded guideline (TSMP,

2002).

Spatial Representation: Four stations was sampled: 5th Avenue Marina Pier, Coronado Pier, J Street Pier

- Chula Vista, and Shelter Island Pier.

Temporal Representation: Samples were collected in February, March, April, May, November 1999 and

March 2000.

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 Diego Bay Shoreline, Chula Vista Marina

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.

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 of 3 samples exceeded the 3.1 ppb CTR chronic saltwater 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: ES - Estuarine Habitat, MA - Marine Habitat

Matrix: Water

Water Quality Objective/ From the CTR: the dissolved copper chronic criterion is 3.1 ppb, and the acute

Water Quality Criterion: criterion is 4.8 ppb.

Quality:

Data Used to Assess Water Data were collected by the RWQCB in 03/2004. Two of 3 samples were in

exceedance for both the acute and chronic criteria. The sample collected at the north end of marina next to bridge and third pier was in exceedance of chronic

criteria, but not acute (SDRWQCB, 2004c).

Samples were collected at the San Diego Bay at the Chula Vista Marina, at the

north end of marina next to bridge and third pier, in front of public loading dock,

and at the south end of marina.

Temporal Representation: Data were collected on 03/20/2004.

Water Segment: San Diego Bay Shoreline, at Americas Cup Harbor

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.

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 of 5 samples exceeded the 3.1 ppb CTR chronic saltwater 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

BI - Preserva.of Bio.Hab.of Spec.Signif., CM - Commercial and Sport Fishing

(CA), ES - Estuarine Habitat, IN - Industrial Service Supply, MA - Marine Habitat, MI - Fish Migration, NA - Navigation, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SH - Shellfish

Harvesting, SP - Fish Spawning, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the CTR: the dissolved copper chronic criterion is 3.1 ppb, and the acute

Water Quality Criterion: criterion is 4.8 ppb.

Data Used to Assess Water

Two of 5 samples were in exceedance of the chronic criteria. Samples collected near the entrance, between piers 3 and 4, and at the west corner of the marina

near the entrance, between piers 3 and 4, and at the west corner of the marina near piling 2 and the Shelter Island boatyard were in exceedance of the chronic

criteria (SDRWQCB, 2004c).

Spatial Representation: Samples were collected at the San Diego Bay, Americas Cup Harbor, near the

entrance, between piers 3 and 4, by the bridge and the pier, near piling number 6 and Kettenberg marina, and at the west corner of the marina near piling 2 and

the Shelter Island boatyard.

Temporal Representation: Samples were collected on 03/15/2004.

Water Segment: San Diego Bay Shoreline, at Coronado Cays

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.

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

An adequate 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 in 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 8 samples exceeded the 3.1 ppb CTR chronic saltwater 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

BI - Preserva.of Bio.Hab.of Spec.Signif., CM - Commercial and Sport Fishing

(CA), ES - Estuarine Habitat, IN - Industrial Service Supply, MA - Marine Habitat, MI - Fish Migration, NA - Navigation, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SH - Shellfish

Harvesting, SP - Fish Spawning, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the CTR, the saltwater acute standard for copper is 4.8 ppb and the

Water Quality Criterion: saltwater chronic standard is 3.1 ppb.

Data Used to Assess Water Seven of 8 samples were in exceedance of the chronic standards. The location

Quality: with no exceedances was at the Southern-most leg (SDRWQCB, 2004c).

Samples were collected at the San Diego Bay shoreline, Coronado Cays, at the

Southern-most leg, near Blue Anchor Cays street, next to the causeway, midarea of Coronado Cays-south of causeway, next to sandy beach; NE leg and at

the intersection of two waterways; North end of Cays.

Temporal Representation: Samples were collected on 05/20/2004.

Water Segment: San Diego Bay Shoreline, at Glorietta Bay

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.

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

An adequate 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 in 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 3.1 ppb CTR chronic saltwater 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

BI - Preserva.of Bio.Hab.of Spec.Signif., CM - Commercial and Sport Fishing

(CA), ES - Estuarine Habitat, IN - Industrial Service Supply, MA - Marine Habitat, MI - Fish Migration, NA - Navigation, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SH - Shellfish

Harvesting, SP - Fish Spawning, WI - Wildlife Habitat

Matrix: Water

Quality:

Water Quality Objective/ From the CTR, the saltwater chronic standard is 3.1 ppb, and the acute criterion

Water Quality Criterion: is 4.8 ppb.

Data Used to Assess Water Data were collected in 05/2004. Two of 3 samples were in exceedance of the

chronic standard. The location where there were no exceedances was next to

Buoy 13; near Avenida de las Arenas (SDRWQCB, 2004c).

Spatial Representation: Samples were collected at the San Diego Bay Shoreline, Glorietta Bay, in front

of Coronado Yacht Club, halfway down the main axis of Glorietta Bay, and next

to Buoy 13; near Avenida de las Arenas

Temporal Representation: Samples were collected on 05/20/2004.

Water Segment: San Diego Bay Shoreline, at Harbor Island (East Basin)

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.

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. Three of 3 samples exceeded the 3.1 ppb dissolved CTR chronic saltwater 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

BI - Preserva.of Bio.Hab.of Spec.Signif., CM - Commercial and Sport Fishing

(CA), ES - Estuarine Habitat, IN - Industrial Service Supply, MA - Marine Habitat, MI - Fish Migration, NA - Navigation, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SH - Shellfish

Harvesting, SP - Fish Spawning, WI - Wildlife Habitat

Matrix: Water

Quality:

Water Quality Objective/ From the CTR: The dissolved copper chronic criterion is 3.1 ppb and the acute

Water Quality Criterion: criterion is 4.8 ppb.

Data Used to Assess Water Data were collected by the RWQCB in 03/2004. Three of 3 samples (1 sample

collected at each location) were in exceedance of the chronic standards

(SDRWQCB, 2004c).

Spatial Representation: Samples were collected at the San Diego Bay, Harbor Island East Basin, off of

last pier in innermost marina, off pier no. 6 from entrance, and off pier no. 2

from entrance.

Temporal Representation: Samples were collected on 03/15/2004.

Water Segment: San Diego Bay Shoreline, at Harbor Island (West Basin)

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.

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. Eight of 10 samples exceeded the 3.1 ppb CTR chronic saltwater 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

BI - Preserva.of Bio.Hab.of Spec.Signif., CM - Commercial and Sport Fishing

(CA), ES - Estuarine Habitat, IN - Industrial Service Supply, MA - Marine Habitat, MI - Fish Migration, NA - Navigation, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SH - Shellfish

Harvesting, SP - Fish Spawning, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the CTR: The dissolved copper chronic criterion is 3.1 ppb, and the acute

Water Quality Criterion: criterion is 4.8 ppb.

Data Used to Assess Water
Quality:

Data were collected by the RWQCB in 03/2004. Eight of 10 samples were in exceedance of the chronic standards. The samples collected between piers 24

and 25 were in exceedance of chronic criteria and samples collected in the main channel were not in exceedance. The sample collected at mid-channel, south of Tom Ham's was not in exceedance of the chronic standard (SDRWQCB, 2004c).

Spatial Representation: Samples were collected at San Diego Bay at Harbor Island in the West Basin at

the innermost location near the fence between the park and hotel, between piers 6 and 7, between piers 12 and 13, between piers 18 and 19, between piers 24 and

25, and in the main channel outside of Warbor Island West.

On 03/20/2004 a sample was collected at Harbor Island West mid-channel, south

of Tom Ham's.

Temporal Representation: Samples were collected on 03/15/2004.

One sample was also collected on 03/20/2004.

Water Segment: San Diego Bay Shoreline, at Marriot Marina

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.

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. Three of 4 samples exceeded the 3.1 ppb dissolved CTR chronic 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

BI - Preserva.of Bio.Hab.of Spec.Signif., CM - Commercial and Sport Fishing

(CA), ES - Estuarine Habitat, IN - Industrial Service Supply, MA - Marine Habitat, MI - Fish Migration, NA - Navigation, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SH - Shellfish

Harvesting, SP - Fish Spawning, WI - Wildlife Habitat

Matrix: Water

Quality:

Water Quality Objective/ From the CTR: the dissolved copper chronic criterion is 3.1 ppb and the acute

Water Quality Criterion: criterion is 4.8 ppb.

Data Used to Assess Water Data were collected by the RWQCB in 03/2004. Three of 4 samples were in

exceedance of the chronic criteria. All samples in exceedance were collected in the Marina. The samples collected in the main channel were not in exceedance

of the chronic criteria (SDRWQCB, 2004c).

Samples were collected in the San Diego Bay at the Mariott Marina and in the

Mariott Marina Main Channel. Samples collected at the marina were collected

on the west and east sides of the marina and in the middle.

Temporal Representation: Samples were collected on 03/115/2004.

San Juan Creek **Water Segment:** DDE **Pollutant: Decision:** List This pollutant is being considered for placement on the section 303(d) list under **Weight of Evidence:** 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 California Toxic Rule: Human Health-FW (water & organisms) criterion of 0.00059 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.Two of 4 samples exceeded the California Toxic Rule: Human Health-FW (water & organisms) criterion of 0.00059 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** 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 **Recommendation:** applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CM - Commercial and Sport Fishing (CA), WA - Warm Freshwater Habitat

Matrix: Water

Lines of Evidence:

Water Quality Objective/ Water Quality Criterion: San Diego RWQCB Basin Plan: No individual pesticide or combination of pesticides shall be present in the water column, sediments, or biota at

concentration(s) that adversely affect beneficial uses.

California Toxic Rule: Human Health-FW (water & organisms) .00059 mg/L.

Data Used to Assess Water

Quality:

Four samples, two exceeding (SWAMP, 2004).

Spatial Representation: One station at San Juan Creek: 33.484429 -117.67577.

Temporal Representation: Four samples collected from October 2002 through May of 2003.

Environmental Conditions: San Juan Creek Watershed: 901.27.

Data Quality Assessment: SWAMP Quality Assurance Plan.

Water Segment: San Marcos Creek

Pollutant: DDE

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.

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 4 samples exceeded the California Toxic Rule: Human Health-FW (water & organisms) criterion of 0.00059 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: CM - Commercial and Sport Fishing (CA), WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: California Toxic Rule: Human Health-FW (water & organisms) .00059 mg/L.

San Diego RWQCB Basin Plan: No individual pesticide or combination of

pesticides shall be present in the water column, sediments, or biota at

concentration(s) that adversely affect beneficial uses.

Data Used to Assess Water

Quality:

Four samples; three samples exceeding (SWAMP, 2004).

Spatial Representation: One Station at San Marcos Creek: 33.13027 -117.192.

Temporal Representation: Samples were collected from March through September of 2002.

Environmental Conditions: San Marcos Creek Watershed 904.51.

Data Quality Assessment: SWAMP Quality Assurance Plan.

Matrix:

San Marcos Creek **Water Segment:** Phosphorus **Pollutant: Decision:** List This pollutant is being considered for placement on the section 303(d) list under **Weight of Evidence:** 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 Control Plan goal of 0.1 mg/L in streams and flowing waters.. 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 8 samples exceeded the basin plan water quality goal 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. After review of the available data and information, SWRCB staff concludes that the **SWRCB Staff** water body-pollutant combination should be placed on the section 303(d) list because **Recommendation:** applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. **Lines of Evidence:** Numeric Line of Evidence Pollutant-Water AG - Agricultural Supply, R1 - Water Contact Recreation, R2 - Non-Contact Beneficial Use: Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Water

Water Quality Objective/ Water Quality Criterion: Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisances or adversely affects beneficial uses. Water Quality Control Plan for the San Diego

Basin Goal of 0.1 mg/L in stream and flowing waters.

Data Used to Assess Water

Quality:

Eight water samples, eight samples exceeding (SWAMP, 2004).

Spatial Representation: Two stations at San Marcos Creek: 33.13027 - 117.192

and at 33.08791 - 117.26933.

Temporal Representation: Eight samples collected from March through September of 2002.

Environmental Conditions: San Marcos Creek Watershed 904.5.

Data Quality Assessment: SWAMP Quality Assurance Plan.

Water Segment: San Marcos Creek

Pollutant: Sediment Bioassays -- Chronic Toxicity -- Freshwater

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 10-day Hyalella azteca test.

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 four samples exhibited significant 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: 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. 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 Regional Board (Region 9 Basin Plan, pages 3-15 to 3-16; September 8, 1994).

Data Used to Assess Water Ouality:

Two out of four samples displayed statistically significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%. One of the four samples (collected April 23, 2002) also displayed statistically significant toxicity in the survival endpoint compared to the negative control, but this data point is not included in the total 'toxic' samples as it had a data qualifier. All samples were tested using the 10-day Hyalella azteca test (SWAMP, 2004).

Spatial Representation:

All samples were collected from one station, San Marcos Creek 3.

Temporal Representation:

Samples were collected from March 2002 through September 2002. Toxicity in the survival endpoint was detected in samples collected on March 12, 2002 and September 18, 2002.

Data Quality Assessment:

SWAMP QAPP.

Numeric Line of Evidence

Toxicity

Beneficial Use:

WA - Warm Freshwater Habitat

Matrix:

Sediment

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. 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 Regional Board (Region 9 Basin Plan, pages 3-15 to 3-16; September 8, 1994).

Data Used to Assess Water Quality:

Two out of four samples displayed statistically significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%. One of the four samples (collected April 23, 2002) also displayed statistically significant toxicity in the survival endpoint compared to the negative control, but this data point is not included in the total 'toxic' samples as it had a data qualifier. All samples were tested using the 10-day Hyalella azteca test (SWAMP, 2004).

Spatial Representation:

All samples were collected from one station, San Marcos Creek 6.

Samples were collected from March 2002 through September 2002. Toxicity in the survival endpoint was detected in samples collected on March 13, 2002 and September 17, 2002. Temporal Representation:

SWAMP QAPP. Data Quality Assessment:

Water Segment: San Marcos Lake

Pollutant: Ammonia as Nitrogen

Decision: List

Weight of Evidence: One line of evidence is available in the administrative record to assess this pollutant.

Three of the 3 samples exceeded the criteria, and this exceeds the allowable frequency

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 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:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, R1 - Water Contact Recreation, R2 - Non-Contact

Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Ammonia, unionized. Maximum 0.025 mg/L. Discharge of wastes shall not cause concentrations of NH3 to exceed this limit (as N) in these waters.

2 7

Data Used to Assess Water

Quality:

Three out of 3 samples were in exceedance. Samples were collected at the San Marcos Lake in May 2001, by the Lake San Marcos Community Association. Three samples were analyzed for Ammonia as N by Environmental Analytical Inc

(Lake San Marcos Community Association, 2001).

Spatial Representation: Three stations: outfall, cross bridge, and park dock were sampled.

Temporal Representation: All samples were taken on one day in May 2001.

Line of Evidence Narrative Description Data

Beneficial Use AG - Agricultural Supply, R1 - Water Contact Recreation, R2 - Non-Contact

Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Non-Numeric Objective: The dissolved oxygen concentration in ocean waters shall not at any time be

depressed more than 10 percent from that which occurs naturally, as the result of

the discharge of oxygen demanding waste materials.

Data Used to Assess Water

Ouality:

There is no numeric data concerning low dissolved oxygen. Information that low dissolved oxygen is potentially a problem was found in the conversation with D.

Gibson on 10/2/01 (Lake San Marcos Community Association, 2001).

Spatial Representation: The comments from citizens do not give a specific location on the lake.

Temporal Representation: The notes concerning low DO are from a conversation on 10/2/01.

Line of Evidence Narrative Description Data

Beneficial Use AG - Agricultural Supply, R1 - Water Contact Recreation, R2 - Non-Contact

Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Non-Numeric Objective: The dissolved oxygen concentration in ocean waters shall not at any time be

depressed more than 10 percent from that which occurs naturally, as the result of

the discharge of oxygen demanding waste materials.

Data Used to Assess Water

Quality:

There was no numerical data pertaining to dissolved oxygen submitted.

Information from the Lake San Marcos Community Association concerning a fish kill in the lake was dated May 9, 2001. The letter says that several fish kills occurred during summer months and that representatives from the California Fish and Game and the San Diego County Department of Health have confirmed that the fish kill was due to a lack of oxygen (Lake San Marcos Community

Association, 2001).

Spatial Representation: No specific locations of the lake were reported in the document.

Temporal Representation: The document is dated May 9, 2001.

Line of Evidence Adverse Biological Responses

Beneficial Use AG - Agricultural Supply, R1 - Water Contact Recreation, R2 - Non-Contact

Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Data Used to Assess Water

Quality:

A photo of an abnormal growth on a fish gill plate was taken on April 15, 2001 and submitted in a letter dated May 9, 2001 by the Lake San Marcos Community Association. Other data concerning nutrients and solids was collected and analyzed in May 2001 (Lake San Marcos Community Association, 2001).

Spatial Representation: No specific location is given as to where the fish was caught.

Temporal Representation: The fish with an abnormal gill was caught on April 15, 2001.

San Marcos Lake **Water Segment:**

Nutrients **Pollutant:**

Decision: List

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

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 6 samples exceeded the Basin Plan criteria, and these exceed the allowable frequency 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-Water Numeric Line of Evidence

Beneficial Use: AG - Agricultural Supply

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

Ammonia, unionized. Maximum 0.025 mg/L. Discharge of wastes shall not cause concentrations of NH3 to exceed this limit (as N) in these waters.

Data Used to Assess Water

Quality:

Three out of 3 samples were in exceedance. Samples were collected at the San Marcos Lake in May 2001, by the Lake San Marcis Community Association. Three samples were analyzed for Ammonia as N by Enviromatrix Analytical Inc (Lake San Marcos Community Association, 2001).

Spatial Representation: Three stations: outfall, cross bridge, and park dock were sampled

Temporal Representation: All samples were taken on one day in May 2001.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply

Matrix: Water

Water Quality Objective/ From the Basin Plan. Total Phosphorus: The maximum, threshold - not to be Water Quality Criterion: exceeded more than 10% of the time is 0.025 mg/L for inland surface waters-any

standing body of water.

Evaluation Guideline: From the Basin Plan: Use unless studies of the specific water body in question

clearly show that water quality objective changes are permissible and changes

are approved by the Regional Board.

Data Used to Assess Water

Quality:

Three out of 3 samples were in exceedance. The three samples were collected by the Lake San Marcos Community Association on May 9, 2001. The data was analyzed on May 12, 2001 by Environmatrix Analytical, Inc (Lake San Marcos

Community Association, 2001).

Spatial Representation: One sample was taken at each of three locations on the lake: Outfall, Cross

Bridge, and Park Dock.

Temporal Representation: Samples were collected on one day, May 9, 2001.

Line of Evidence Narrative Description Data

Beneficial Use AG - Agricultural Supply

Information Used to Assess

Water Quality:

Information includes notes from a conversation with D. Gibson and a note from

a citizen concerning nutrients and their sources. Notes mention that the water is potentially impaired but there doesn't appear to be enough data to support that it

is impaired.

Non-Numeric Objective: From the Basin Plan: Inland surface waters, bays and estuaries, and coastal

lagoon waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. Concentrations of nitrogen and phosphorus, by themselves or in combination with other nutrients, shall be maintained at levels

below those which stimulate algae and emergent plant growth.

Data Used to Assess Water The data include notes from a conversation with D. Gibson on 10/1/01 and a

Quality: note from a citizen (Thielen), submitted by the Lake San Marcos Community Association (Lake San Marcos Community Association, 2001).

Spatial Representation: Descriptions seem to include the entire lake.

Temporal Representation: Descriptions are dated from February 2001 to around November 2001.

San Marcos Lake **Water Segment:**

Phosphorus **Pollutant:**

Decision: List

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

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 Basin Plan 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

AG - Agricultural Supply, R1 - Water Contact Recreation, R2 - Non-Contact Beneficial Use:

Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

From the Basin Plan. Total Phosphorus: The maximum, threshold - not to be exceeded more than 10% of the time is 0.025 mg/L for inland surface waters-any

standing body of water.

Evaluation Guideline: From the Basin Plan: Use unless studies of the specific water body in question

clearly show that water quality objective changes are permissible and changes

are approved by the Regional Board.

Data Used to Assess Water Three out of 3 samples were in exceedance. The three samples were collected by

the Lake San Marcos Community Association on May 9, 2001. The data was analyzed on May 12, 2001 by Environmatrix Analytical, Inc (Lake San Marcos

Community Association, 2001).

Spatial Representation: One sample was taken at each of three locations on the lake: Outfall, Cross

Bridge, and Park Dock.

Temporal Representation: Samples were collected on one day, May 9, 2001.

Quality:

Water Segment: San Marcos Lake

Pollutant: Total Dissolved Solids

Decision: List

Weight of Evidence: 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 Basin Plan criteria, and these exceed the allowable

frequency 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-Sediment

Beneficial Use: AG - Agricultural Supply

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: Total Dissolved Solids: 500 units

Evaluation Guideline: Concentration not to be exceeded more than 10% of the time during any one

year period.

Data Used to Assess Water Three out of 3 samples were in exceedance. Samples were collected by the Lake

Quality: San Marcos Community Association on May 9, 2001. The samples were

analyzed by Enviromatrix Analytical, Inc on May 14, 2001 (Lake San Marcos

Community Association, 2001).

Spatial Representation: Three samples were collected on the lake, one each at West Discovery Bridge,

LMS Side Discovery Bridge, and LMS Wake Bridge.

Temporal Representation: Samples were collected once on May 9, 2001.

Water Segment: San Vicente Reservoir

Pollutant: Chloride

Decision: List

Weight of Evidence: 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. Fifty-six of 60 samples exceeded the Basin Plan criteria, 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: AG - Agricultural Supply, MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters in San Vicente HA and all beneficial uses, the WQO for Chloride is 50~mg/L. This concentration is not to

be exceeded more than 10% of the time during any one year period.

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. from 1996 to 2000.

Fifty-six of 60 samples were in exceedance (SWRCB, 2003).

Spatial Representation: Samples were collected at San Vicente Reservoir site SVA-0.

Samples were collected on a monthly basis from 01/02/1996 to 12/04/2000.

Temporal Representation:

Water Segment: San Vicente Reservoir

Pollutant: Color

Decision: List

Weight of Evidence: 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 701 out of 1,841 samples that exceeded the Basin Plan criteria, and

these exceed the allowable frequency 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-Nuisance

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use,

the WQO for Color is 15 units.

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. from 1996 to 2000.

Forty-three of 235 samples were in exceedance.

Spatial Representation: Samples were collected at San Vicente Reservoir site SVA-GA110.

Temporal Representation: Four to 5 samples were collected per month, monthly from 01/1996 to 12/2000.

Numeric Line of Evidence Pollutant-Nuisance

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with a municipal beneficial use,

Water Quality Criterion: the WQO for Color is 15 units.

Data Used to Assess Water Data were collected by the City of San Diego Water Dept. from 1996 to 2000.

Quality: Fifty-eight of 175 samples were in exceedance.

Spatial Representation: Samples were collected at San Vicente Reservoir site SVA-GA130.

Temporal Representation: Four to 5 samples were collected monthly from 01/1996 to 03/2000.

Numeric Line of Evidence Pollutant-Nuisance

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with a municipal beneficial use,

Water Quality Criterion: the WQO for Color is 15 units.

Data Used to Assess Water Data were collected by the City of San Diego Water Dept. from 1996 to 2000.

Quality: Sixty-six of 236 samples were in exceedance.

Spatial Representation: Samples were collected at San Vicente Reservoir site SVA-GA140.

Temporal Representation: One to 5 samples were collected monthly from 01/1996 to 12/2000.

Numeric Line of Evidence Pollutant-Nuisance

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with a municipal beneficial use,

Water Quality Criterion: the WQO for Color is 15 units.

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. from 1996 to 1999.

Sixty-eight of 109 samples were in exceedance.

Spatial Representation: Samples were collected at San Vicente Reservoir site SVA-GA160.

Three to 5 samples were collected monthly from 01/1996 to 02/1999.

Numeric Line of Evidence Pollutant-Nuisance

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Criterion:

Water Quality Objective/ From the Basin Plan: For inland surface waters with a municipal beneficial use,

the WQO for Color is 15 units.

Data Used to Assess Water Dept. from 1996 to 1999.

Quality: Forty-two of 64 samples were in exceedance.

Spatial Representation: Samples were collected at San Vicente Reservoir site SVA-GA170.

Three to 5 samples were collected monthly from 01/1996 to 02/1999.

Numeric Line of Evidence Pollutant-Nuisance

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with a municipal beneficial use,

Water Quality Criterion: the WQO for Color is 15 units.

Data Used to Assess Water Data were collected by the City of San Diego Water Dept. from 1996 to 2000.

Quality: There were 130 out of 236 samples that were in exceedance.

Spatial Representation: Samples were collected at San Vicente Reservoir site SVA-GA50.

Temporal Representation: One to 5 samples were collected monthly from 01/1996 to 12/2000.

Numeric Line of Evidence Pollutant-Nuisance

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with a municipal beneficial use,

Water Quality Criterion: the WQO for Color is 15 units.

Data Used to Assess Water Data

Quality:

Data were collected by the City of San Diego Water Dept. from 1996 to 1999.

Thirty-six of 92 samples were in exceedance.

Spatial Representation: Samples were collected at San Vicente Reservoir site SVA-GA70.

Temporal Representation: One to 5 samples were collected per month from 01/1996 to 02/1999.

Numeric Line of Evidence Pollutant-Nuisance

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with a municipal beneficial use,

Water Quality Criterion: the WQO for Color is 15 units.

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. from 1996 to 2000.

There were 87 out of 236 samples that were in exceedance.

Spatial Representation: Samples were collected at San Vicente Reservoir site SVA-GA80.

Temporal Representation: One to 5 samples were collected monthly from 01/1996 to 12/2000.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters with a municipal beneficial use,

Water Quality Criterion: the WQO for Color is 15 units.

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. from 1996 to 2000.

There were 75 out of 189 samples that were in exceedance.

Spatial Representation: Samples were collected at San Vicente Reservoir at site SVA-0.

Temporal Representation: Samples were collected from 01/02/1996 to 12/04/2000. Samples were collected

on a monthly basis, with multiple samples being collected in some months.

Numeric Line of Evidence Pollutant-Water

MU - Municipal & Domestic Beneficial Use:

Matrix: Water

Water Quality Objective/

Water Quality Criterion: the WQO for Color is 15 units.

Data Used to Assess Water

Quality:

Data were collected by the City of San Diego Water Dept. from 1996 to 1999.

From the Basin Plan: For inland surface waters with a municipal beneficial use,

Forty-eight of 74 samples were in exceedance.

Samples were collected at San Vicente Reservoir site SVA-GA160. Spatial Representation:

Temporal Representation: Multiple samples were collected per month, monthly from 01/29/1996 to

02/16/1999.

Numeric Line of Evidence Pollutant-Nuisance

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/

Water Quality Criterion:

Data Used to Assess Water

Quality:

From the Basin Plan: For inland surface waters with a municipal beneficial use,

the WQO for Color is 15 units.

Data were collected by the City of San Diego Water Dept. from 1996 to 2000.

Forty-eight of 195 samples were in exceedance.

Spatial Representation: Samples were collected in San Vicente Reservoir site SVA-GA100.

Temporal Representation: Samples were collected 4-5 times per month, monthly from 01/1996 to 09/2000.

Water Segment: San Vicente Reservoir

Pollutant: Manganese

Decision: List

Weight of Evidence: 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 55 samples exceeded the Basin Plan criteria and the criteria was exceeded more than 10% of time during 3 years. 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: The water quality objective for manganese in San Vicente Reservoir is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not be exceeded more than 10% of the

time during any one year period.

Data Used to Assess Water Data were collected by the City of San Diego Water Dept. from 1996 to 2000.

Seven of 55 samples were in exceedance. Three of the 5 years had exceedances more than 10% of the time. Quality:

Samples were collected at San Vicente Reservoir site SVA-0. Spatial Representation:

Temporal Representation: Samples were collected on a monthly basis from 01/02/1996 to 09/06/2000.

Water Segment: San Vicente Reservoir

Pollutant: Sulfates

Decision: List

Weight of Evidence: 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. Fifty-seven of 60 samples exceeded the Basin Plan criteria, 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: AG - Agricultural Supply, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm

Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters in the San Vicente HA and all beneficial uses, the WQO for sulfate is 65 mg/L. This concentration is not to be

exceeded more than 10% of the time during any one year period.

Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Fifty-seven of 60 samples were in exceedance. Data Used to Assess Water

Quality:

Samples were collected at San Vicente Reservoir site SVA-0. Spatial Representation:

Temporal Representation: Samples were collected on a monthly basis from 01/02/1996 to 12/04/2000.

Water Segment: San Vicente Reservoir

Pollutant: Total Dissolved Solids

Decision: List

Weight of Evidence: 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-nine of 30 samples exceeded the Basin Plan criteria, 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: AG - Agricultural Supply, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm

Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters in the San Vicente HA, with all beneficial uses, the WOO for TDS is 300 mg/L. This concentration is not to be

exceeded more than 10% of the time during any one year period.

Data were collected by the City of San Diego Water Dept. form 1998 to 2000. Twenty-nine of 30 samples were in exceedance. Data Used to Assess Water

Quality:

Spatial Representation: Samples were collected at San Vicente Reservoir site SVA-0.

Temporal Representation: Samples were collected monthly from 07/06/1998 to 12/04/2000.

Water Segment: San Vicente Reservoir

Pollutant: pH (high)

Decision: List

Weight of Evidence: 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 60 samples exceeded the Basin Plan criteria, 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: AG - Agricultural Supply, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm

Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters and all beneficial uses, the WQO

Water Quality Criterion: for pH is 6.5 (minimum) to 8.5 (maximum).

Data Used to Assess Water Data were collected by the City of San Diego Water Dept. from 1996 to 2000.

Quality: Twenty-eight of 60 samples were in exceedance of the maximum standard.

Spatial Representation: Samples were collected at San Vicente Reservoir site SVA-0.

Temporal Representation: Samples were collected on a monthly basis from 01/1996 to 12/2000.

Water Segment: Sandia Creek

Pollutant: Iron

Decision: List

Weight of Evidence:

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 11 samples exceeded the Basin Plan criteria, 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: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for iron is 0.3 mg/L.

Data Used to Assess Water

Quality:

Data were collected by LAW Crandall from 1997 to 2000. Four of 11 samples were in exceedance.

Spatial Representation: Samples were collected at Sandia Creek. Exact sampling location was not

reported.

Temporal Representation: Samples were collected on a quarterly basis from 12/1997 to 06/2000.

QA/QC Equivalent: Data used in 2002 assessment.

Water Segment: Sandia Creek

Pollutant: Manganese

Decision: List

Weight of Evidence: 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 11 samples exceeded the Basin Plan criteria and the criteria was exceeded more than 10% of the time during two of the years. These exceed the allowable frequency listed in Table 2.1 of the Listing Policy.

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, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: The water quality objective for manganese in Sandia Creek is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not be exceeded more than 10% of the

time during any one year period.

Data Used to Assess Water

Quality:

Data were collected by LAW Crandall from 1997 to 2000. Two of 11 samples were in exceedance. The criteria was exceeded more than 10% of the time

during 2 years.

Spatial Representation: Samples were collected at Sandia Creek. Exact location was not reported.

Temporal Representation: Samples were collected on a quarterly basis from 12/1997 to 06/2000.

QA/QC Equivalent: Data used in 2002 assessment.

Water Segment: Sandia Creek

Pollutant: 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. 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 four 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, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters, enclosed bays and estuaries,

Water Quality Criterion: coastal lagoons, and ground waters and all beneficial uses, analogous threshold

> values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis

shall be used.

Data Used to Assess Water

Quality:

Data were collected by LAW Crandall from 1997 to 2000. Although 6 samples were collected, only 4 samples were collected on the same day as phosphorus samples. From this data set, water quality was assessed using the N:P ratio from the 4 days on which both N and P samples were collected. Two of the 4 ratios

were in exceedance of the 10:1 ratio.

Spatial Representation: Samples were collected at Sandia Creek. Exact sampling location was not

reported.

Samples were collected 1-2 times per year from 12/1997 to 03/2000. Temporal Representation:

QA/QC Equivalent: Data used in 2002 assessment.

Water Segment: Sandia Creek

Pollutant: Sulfates

Decision: List

Weight of Evidence:

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 11 samples exceeded the Basin Plan criteria, 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: AG - Agricultural Supply, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for sulfate is 250 mg/L. This concentration is not to be exceeded more than 10%

of the time during any one year period.

Data were collected by LAW Crandall from 1997 to 2001. Five of 11 samples were in exceedance. Data Used to Assess Water

Quality:

Spatial Representation: Samples were collected at Sandia Creek. Exact sample location was not

reported.

Temporal Representation: Samples were collected on a quarterly basis from 12/1997 to 06/2000.

QA/QC Equivalent: Data used in 2002 assessment.

Water Segment: Santa Margarita River (Lower)

Pollutant: Mercury

Decision: List

Weight of Evidence: 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 8 samples exceeded the Basin Plan criteria, and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

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: OEHHA screening value for mercury 0.3 mg/kg (ppm)

Data Used to Assess Water

Quality:

Two of 8 samples for mercury in fish tissue taken between March 1979 and $\,$

August 1999 exceeded the fish consumption standard (TSMP, 2002).

Water Segment: Soledad Canyon

Pollutant: Sediment Bioassays -- Chronic Toxicity -- Freshwater

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 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 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.

Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Sediment

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. 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 Regional Board (Region 9 Basin Plan, pages 3-15 to 3-16; September 8, 1994).

Data Used to Assess Water Ouality:

Two out of four samples displayed statistically significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%. One of the four samples (collected April 24, 2002) also displayed statistically significant toxicity in the survival endpoint compared to the negative control, but this data point is not included in the total toxic samples as it had a data qualifier. All samples were tested using the 10-day Hyalella azteca test (SWAMP, 2004).

Spatial Representation:

All samples were collected from one station, Soledad Canyon Creek 2.

Temporal Representation:

Samples were collected from March 2002 through September 2002. Toxicity in the survival endpoint was detected in samples collected on March 13, 2002 and September 18, 2002.

Data Quality Assessment:

SWAMP QAPP.

Water Segment: Sutherland Reservoir

Pollutant: Manganese

Decision: List

Weight of Evidence: 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 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. Seven of 19 samples exceeded the Basin Plan's water quality objective, and this

exceeds the allowable frequency listed in Table 3.1 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 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: The water quality objective for manganese in Sutherland Reservoir is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not be exceeded more than 10% of the

time during any one year period.

Data Used to Assess Water

Quality:

Data was collected at site SUA-0 by the City of San Diego Water Dept. from January 1996 to September 2000. Seven of 19 samples were in exceedance and

the criteria was exceeded more than 10% of the time in all 5 years.

Spatial Representation: Samples were collected at site SUA-0 near the water's surface.

Temporal Representation: Samples were collected on a quarterly basis between January 1996 and

September 2000.

QA/QC Equivalent: Data used in 2002 assessment.

Water Segment: Sutherland Reservoir

Pollutant: pH (high)

Decision: List

Weight of Evidence: 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 19 samples exceeded the Basin Plan criteria, and these exceed the allowable frequency 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, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters and all beneficial uses, the WQO

Water Quality Criterion: for pH is 6.5 (minimum) to 8.5 (maximum).

Data Used to Assess Water Data was collected at site SUA-0 by the City of San Diego Water Dept. between

Quality: March 1996 and December 2000. Ten of 19 samples were in exceedance

(SWRCB, 2003).

Samples were collected at site SUA-0 near the water surface.

Temporal Representation: Samples were collected on a quarterly basis between March 1996 and December

2000.

QA/QC Equivalent: Data used in 2002 assessment.

Sweetwater Reservoir **Water Segment:**

Pollutant: Oxygen, Dissolved

Decision: List

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

that there is sufficient justification against 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. There were 324 out of 552 samples that exceeded the Basin Plan's water quality objective and this exceeds the allowable frequency for conventional pollutants from 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 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, IN - Industrial Service Supply, MU - Municipal &

Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 -Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Water Matrix:

Water Quality Objective/ From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in Water Quality Criterion: inland surface waters with designated MAR or WARM beneficial uses or less

than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of

the time.

Data Used to Assess Water Quality:

Data were collected by the USGS on one day every other month for 10 months. All samples collected in 1998 were below the minimum standard. Samples collected in 1999 met the standards at sampling depths of at least 3m and shallower (often samples at 5 and 6 m still met stds.), but showed a decrease in DO concentration to below the minimum standard as the sample depth increased. Overall, with all sampling depths included, 40 of 70 samples were below the minimum WOO (USGS, 2002).

Spatial Representation:

Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond. Samples were collected at depths of 0.1-13.0 meters.

Temporal Representation:

Samples were collected on one day every other month for 10 months from 09/10/1998 to 07/12/1999. 12-15 samples were collected per sampling day.

Data Quality Assessment:

USGS:http://water.usgs.gov/owq/FieldManual/

QA/QC Equivalent:

Data is from USGS Water Quality Monitoring Study.

Numeric Line of Evidence

Pollutant-Water

Beneficial Use:

AG - Agricultural Supply, IN - Industrial Service Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix:

Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.

Data Used to Assess Water Quality:

Data were collected by Sweetwater Authority from 07/2000 to 06/2001. At a depth of 0 ft., none of the 6 samples were below the standard. At 5 ft., 2 of 6 samples were below the standard, and at 10 ft., one of 6 samples were below the

standard (USGS, 2002).

Spatial Representation:

Samples were collected at Sweetwater Lake at the Log Boom..

Temporal Representation:

Samples were collected 07/18/2000 to 06/20/2001. Samples were collected a total of 6 times, 3 in 2000 and 3 in 2001. Multiple seasons are represented.

Numeric Line of Evidence

Pollutant-Water

Beneficial Use:

AG - Agricultural Supply, IN - Industrial Service Supply, MU - Municipal &

Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix:

Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.

Data Used to Assess Water Quality:

Data were collected by Sweetwater Authority from 07/2000 to 06/2001. At a depth of 0 ft., 0 of 6 samples were below the standard. At 5 ft. in depth, one of 6 samples were below the standard, and at 10 ft. down, one of 6 samples was below the standard (USGS, 2002).

Spatial Representation:

Samples were collected at Sweetwater Lake at the Intake Tower.

Temporal Representation:

Samples were collected 07/18/2000 to 06/20/2001. Samples were collected a total of 6 times, 3 in 2000 and 3 in 2001. Multiple seasons are represented.

Numeric Line of Evidence

Pollutant-Water

Beneficial Use:

AG - Agricultural Supply, IN - Industrial Service Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix:

Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters with all beneficial uses except From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.

Data Used to Assess Water Quality:

Data were collected by the USGS once every two months for a year. At this location, all samples from 09/1998, 11/1998, and 09/1999 were at or below the standard. Samples collected in 01/1999, 03/1999, 05/1999, and 07/1999 showed DO levels above the standard at depths of less than 5 m. January samples showed DO levels meeting the WQO from 0.1 to 13.6 meters deep. In some cases, at depths deeper than 5.0 m, there is a more dramatic drop in DO. Overall, with samples at all depths included, 54 of 86 were below the minimum standard for dissolved oxygen (USGS, 2002).

Spatial Representation:

Samples were collected at Sweetwater Reservoir near the pump tower at depths ranging from 0.1-16.0~m.

Temporal Representation: Samples were collected once every 2 months from 09/09/1998 to 09/20/1999. 5-

20 samples were collected per day.

Data Quality Assessment: USGS: http://water.usgs.gov/owq/FieldManual/

QA/QC Equivalent: Data is from USGS Water Quality Monitoring Study.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, IN - Industrial Service Supply, MU - Municipal &

Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in Water Quality Criterion: inland surface waters with designated MAR or WARM beneficial uses or less

inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of

the time.

Data Used to Assess Water

Quality:

Data were collected by the USGS one day every other month for a year. For all sampling days, except 11/3/1998, at least the top 3 meters of sample depth showed DO samples above the minimum standard. For all sampling days, DO concentration declined as the sample depth increased. Overall, with all sample depths included, 72 of 112 samples were in exceedance (USGS, 2002).

Spatial Representation: Samples were collected at Sweetwater Reservoir at the center of minimum pool.

Samples were collected at depths of 0.1-17.0 meters.

Temporal Representation: Samples were collected on one day every other month for a year from

09/09/1998 to 09/20/1999. There were 15-20 samples collected per day.

Data Quality Assessment: USGS: http://water.usgs.gov/owq/FieldManual/

QA/QC Equivalent: Data is from a USGS Water Quality Monitoring Study.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, IN - Industrial Service Supply, MU - Municipal &

Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Non-Contact Recreation, WA - Wallin Preshwater Habitat, WI - Whithie Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.

Data Used to Assess Water Ouality:

Data were collected by the USGS on one day every other month for 10 months. No samples collected in 1998 were above the minimum standard. Samples collected in 1999 showed that at shallower sample depths, DO levels met the standard, but that as depth increased, DO levels decreased. Overall, with all sample depths included, 59 of 87 samples were below the minimum standard (USGS, 2002).

Spatial Representation:

Samples were collected at Sweetwater Reservoir near the recreation area. Samples were collected at depths of 0.1 to 16.0 meters.

Temporal Representation:

Samples were collected one day per month, every other month from 09/10/1998 to 07/12/1999. There were 10-17 samples collected per sampling day.

Data Quality Assessment:

USGS: http://water.usgs.gov/owq/FieldManual/

QA/QC Equivalent:

Data is from USGS Water Quality Monitoring Study.

Numeric Line of Evidence

Pollutant-Water

Beneficial Use:

AG - Agricultural Supply, IN - Industrial Service Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix:

Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.

Data Used to Assess Water Quality:

Data were collected by USGS from 09/1998 to 07/1999. All samples collected in 1998 were below the minimum standard. Samples collected in 1999 all met the standard within at least the top 3 m, but DO measurements decreased to below the minimum standard as the sample depth increased. Overall, with samples at all depths included, 41 of 68 samples were below the minimum standard. All samples that met the standard were within the top 5 m (USGS, 2002).

Spatial Representation:

Samples were collected at Sweetwater Reservoir near Vista del Lago Station at depths from 0.1 to 12.0 meters.

Temporal Representation: Samples were collected once every other month from 09/10/1998 to 07/12/1999.

Multiple (10-15) samples were collected per day.

Data Quality Assessment: USGS: http://water.usgs.gov/owq/FieldManual/

QA/QC Equivalent: Data is from a USGS Water Quality Monitoring Study.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, IN - Industrial Service Supply, MU - Municipal &

Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in Water Quality Criterion: inland surface waters with designated MAR or WARM beneficial uses or less

inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of

the time.

Data Used to Assess Water

Quality:

Data were collected by the USGS on one day every other month for a year. The samples collected in this set all met the standard except for those collected on

samples collected in this set all met the standard except for those collected on 11/03/1998. Also, in 09/1998, as sample depth increased, the DO concentration decreased to below the minimum standard. This is the only sampling day on which there is an obvious trend that DO concentration decreases as depth increases. For other sampling days, samples were not collected at depths deeper

than 5.7 meters, making it difficult to see an obvious trend of a decrease in DO concentration with an increase in sampling depth. Overall, with all sample depths included, 7 of 31 samples were below the minimum standard (USGS,

2002).

Spatial Representation: Samples were collected at Sweetwater Reservoir east end reservoir fill boundary.

Samples were collected at depths of 0.1-5.7 meters.

Temporal Representation: Samples were collected on one day every other month for a year from

09/10/1998 to 09/20/1999. Approximately 5 samples were collected per

sampling day.

Data Quality Assessment: USGS: http://water.usgs.gov/owq/FieldManual/

QA/QC Equivalent: Data used in USGS Water Quality Monitoring Study.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, IN - Industrial Service Supply, MU - Municipal &

Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in Water Quality Criterion: inland surface waters with designated MAR or WARM beneficial uses or less

inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of

the time.

Data Used to Assess Water

Quality:

Data were collected by the USGS on one day every other month for 10 months. All samples, except those collected on 11/0/1998 showed that at shallower depths, the DO concentrations were above the minimum standard. All samples collected on 11/03/1998 were below the minimum standard. All sampling days showed that as depth increased, the DO concentration decreased. Samples collected in September and July showed more dramatic decreases in DO concentration as the depth increased. Overall, with all sampling depths included,

46 of 80 sample were below the minimum standard (USGS, 2002).

Spatial Representation: Samples were collected at Sweetwater Reservoir minimum pool boundary East.

Samples were collected at depths of 0.1 to 13.5 meters.

Temporal Representation: Samples were collected on one day every other month for 10 months from

09/10/1998 to 07/12/1999. Approximately 12 samples were collected per

sampling day.

Data Quality Assessment: USGS: http://water.usgs.gov/owq/FieldManual/

QA/QC Equivalent: Data is from USGS Water Quality Monitoring Study.

Sweetwater Reservoir **Water Segment:**

Total Dissolved Solids Pollutant:

Decision: List

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

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 8 samples exceeded the Basin Plan criteria, and these exceed 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:

Pollutant-Water Numeric Line of Evidence

AG - Agricultural Supply, IN - Industrial Service Supply, MU - Municipal & Beneficial Use:

Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 -

Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/

From the Basin Plan: For inland surface waters and all beneficial uses is 500. Water Quality Criterion: This concentration is not to be exceeded more than 10% of the time during any

one year period.

Data Used to Assess Water

Quality:

Data were collected by RWQCB9 from 07/1997 to 11/2000. Six of 8 samples

were in exceedance.

Spatial Representation: Samples were collected at Sweetwater Reservoir. Exact location was not

reported.

Samples were collected from 07/1997 to 11/2000 once per day on 8 days during this time span. Samples were collected mostly during the winter and summer Temporal Representation:

months.

QA/QC Equivalent: Data used in 2002 assessment.

Water Segment: Tecolote Creek

Pollutant: Phosphorus

Decision: List

Weight of Evidence: 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 9 samples exceeded the Basin Plan criteria, 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: R2 - Non-Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters-streams and other flowing waters with all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be the desired goal in order to prevent plant nuisance in streams and other

flowing waters; not to be exceeded more than 10% of the time.

Data Used to Assess Water Quality:

Data were collected by the City of San Diego from 11/1997 to 03/2000. Nine of 9 samples were in exceedance.

Samples were collected in Tecolote Creek at site SD5. The exact location of this site is unknown. Spatial Representation:

Temporal Representation: Samples were collected from 11/1997 to 03/2000. 2-3 samples were collected

per year.

QA/QC Equivalent: Data used in 2002 assessment.

Tecolote Creek **Water Segment:**

Turbidity **Pollutant:**

Decision: List

Weight of Evidence: 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 9 samples exceeded the Basin Plan criteria, and these exceed 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: R2 - Non-Contact Recreation

Matrix: Water

Water Quality Objective/

From the Basin Plan: For inland surface waters and all beneficial uses, the WQO Water Quality Criterion: for turbidity is 20 ntu.

Data were collected by the City of San Diego from 11/1997 to 03/2000. Seven of Data Used to Assess Water Quality:

9 samples were in exceedance.

Spatial Representation: Samples were collected at Tecolote Creek site SD5. The location of this site is unknown.

Samples were collected from 11/1997 to 03/2000. Two to 3 samples were collected per year. Temporal Representation:

QA/QC Equivalent: Data used in 2002 assessment.

Water Segment: Temecula Creek

Pollutant: Nitrogen

Decision: List

Weight of Evidence: 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 160 samples exceeded the Basin Plan criteria, 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: AG - Agricultural Supply, GW - Groundwater Recharge, IN - Industrial Service

Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm

Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters, enclosed bays and estuaries, coastal lagoons, and ground waters and all beneficial uses, analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis

shall be used.

Data Used to Assess Water

Quality:

Data were collected by Ranch California Water District from 1999 to 2002. Nineteen of 160 samples were in exceedance.

Spatial Representation: Samples were collected at Temecula Creek.

Temporal Representation: Samples were collected 4-5 times per month from 03/1999 to 04/2002

Water Segment: Temecula Creek

Pollutant: Phosphorus

Decision: List

Weight of Evidence: 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 139 of 160 samples that exceeded the Basin Plan criteria, 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: AG - Agricultural Supply, GW - Groundwater Recharge, IN - Industrial Service

Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm

Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters - streams and other flowing

Water Quality Criterion: wat

and all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be desired goal in order to prevent plant nuisance in streams and other flowing

waters; not to be exceeded more than 10% of the time.

Evaluation Guideline: Use unless studies of the specific water body in question clearly show that water

quality objective changes are permissible and changes are approved by the

Regional Board.

Data Used to Assess Water

Quality:

Data were collected by the Rancho California Water District in 1999-2002.

There were 139 of 160 samples that were in exceedance.

Spatial Representation: Samples were collected at Temecula Creek.

Temporal Representation: Samples were collected 4-5 times per month from 03/31/1999 to 04/17/2002.

Water Segment: Temecula Creek

Pollutant: Total Dissolved Solids

Decision: List

Weight of Evidence: 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 157 of 161 samples that exceeded the Basin Plan criteria, and these exceed 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, GW - Groundwater Recharge, IN - Industrial Service

Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm

Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of

the time during any one year period.

Data Used to Assess Water

Quality:

Data were collected by RWQCB9 in 1998. One sample was collected and was in

exceedance.

Samples were collected at Temecula Creek east of the confluence, west of I-15. Spatial Representation:

Temporal Representation: Samples were collected on 06/09/1998.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, GW - Groundwater Recharge, IN - Industrial Service

> Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 -Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm

Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For inland surface waters and all beneficial uses, the WQO Water Quality Criterion:

for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of

the time during any one year period.

Data Used to Assess Water

Quality:

Data were collected by Rancho California Water District from 1999 to 2002.

There were 156 of 160 samples that were in exceedance.

Spatial Representation: Samples were collected at Temecula Creek.

Samples were collected 4-5 times per month from 03/31/1999 to 04/17/2002. Temporal Representation:

Water Segment: Tijuana River Estuary

Pollutant: Turbidity

Decision: List

Weight of Evidence: 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 4965 of 28167 samples that exceeded the Basin Plan criteria, and these

exceed the allowable frequency 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

BI - Preserva.of Bio.Hab.of Spec.Signif., CM - Commercial and Sport Fishing

(CA), ES - Estuarine Habitat, MA - Marine Habitat, MI - Fish Migration, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SH - Shellfish Harvesting, SP - Fish Spawning, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: From the Basin Plan: For lagoons and estuaries and all beneficial uses, the maximum increase when Natural Turbidity is 0-50 NTU is 20 % over natural turbidity. The Maximum Increase when Natural Turbidity is 50-100 NTU is 20 ntu. The Maximum Increase when Natural Turbidity is >100 NTU is 10 % over

natural turbidity.

Evaluation Guideline: The transparency of waters in lagoons and estuaries shall not be less than 50% of

the depth at locations where measurement is made by means of standard Secchi

disk, except where lesser transparency is caused by rainfall runoff from

undisturbed natural areas and dredging projects conducted in conformance with waste discharge requirements of the Regional Board. With these two exceptions, increases in turbidity attributable to controllable water quality factors shall not

exceed the above limits.

Data Used to Assess Water

Quality:

Data were collected by the Tijuana River NERR in 1998. There were 7,055 of 8,559 samples that were 20 ntu or lower. There were 1,601 of 8,559 samples that were above 21 ntu. The highest turbidity recorded was 1,388 ntu. Some negative

turbidities were recorded as well.

Spatial Representation: Samples were collected at the Tijuana River Estuary site TL.

Temporal Representation: Samples were collected every 30 minutes from 01/01/1998 to 12/27/1998.

During the sampling months, data for some day were not recorded. During the months in which samples were collected, at least 2-3 days worth of data were recorded. Samples were not recorded in 08/1997, 09/1997, 03/1998, 04/1998,

08/1998, and 09/1998.

Environmental Conditions: Possible storm event(s) occurred during some sampling months.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: BI - Preserva.of Bio.Hab.of Spec.Signif., CM - Commercial and Sport Fishing

(CA), ES - Estuarine Habitat, MA - Marine Habitat, MI - Fish Migration, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SH - Shellfish Harvesting, SP - Fish Spawning, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ From the Basin Plan: For lagoons and estuaries and all beneficial uses, the Water Quality Criterion: maximum increase when Natural Turbidity is 0-50 NTU is 20 % over natural

maximum increase when Natural Turbidity is 0-50 NTU is 20 % over natural turbidity. The Maximum Increase when Natural Turbidity is 50-100 NTU is 20 ntu. The Maximum Increase when Natural Turbidity is >100 NTU is 10 % over

natural turbidity.

Evaluation Guideline: The transparency of waters in lagoons and estuaries shall not be less than 50% of

the depth at locations where measurement is made by means of standard Secchi

disk, except where lesser transparency is caused by rainfall runoff from

undisturbed natural areas and dredging projects conducted in conformance with

waste discharge requirements of the Regional Board. With these two exceptions, increases in turbidity attributable to controllable water quality factors shall not

exceed the above limits.

Data Used to Assess Water

Quality:

Data were collected by San Diego RWQCB in 1997 and 1998. Five monthly averages were reported. Average turbidity levels ranged from 23-130.

Spatial Representation: Samples were collected at Tijuana River Estuary. Exact sample location was not

reported.

Temporal Representation: Samples were collected in 12/1997 and 02-04/1998 and 10/1998. Only averages

were reported.

QA/QC Equivalent: Data used in 2002 assessment.

Numeric Line of Evidence

Pollutant-Water

Beneficial Use: BI - Preserva.of Bio. Hab.of Spec. Signif., CM - Commercial and Sport Fishing

(CA), ES - Estuarine Habitat, MA - Marine Habitat, MI - Fish Migration, R1 -Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SH - Shellfish Harvesting, SP - Fish Spawning, WI -

Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

From the Basin Plan: For lagoons and estuaries and all beneficial uses, the maximum increase when Natural Turbidity is 0-50 NTU is 20 % over natural turbidity. The Maximum Increase when Natural Turbidity is 50-100 NTU is 20 ntu. The Maximum Increase when Natural Turbidity is >100 NTU is 10 % over

natural turbidity.

Evaluation Guideline: The transparency of waters in lagoons and estuaries shall not be less than 50% of

the depth at locations where measurement is made by means of standard Secchi

disk, except where lesser transparency is caused by rainfall runoff from

undisturbed natural areas and dredging projects conducted in conformance with waste discharge requirements of the Regional Board. With these two exceptions, increases in turbidity attributable to controllable water quality factors shall not

exceed the above limits.

Data Used to Assess Water

Quality:

Data were collected by the Tijuana River NERR in 1999. There were 1,372 of 1,375 samples that ranged from 0-35 ntu. 3 of 1,375 samples were between 206

and 992 NTU.

Samples were collected at Tijuana River Estuary site OS. Spatial Representation:

Temporal Representation: Samples were collected every 30 minutes from 03/01/1999 to 03/29/1999. Data used in 2002 assessment.

Numeric Line of Evidence

Pollutant-Water

Beneficial Use:

Matrix:

BI - Preserva.of Bio. Hab.of Spec. Signif., CM - Commercial and Sport Fishing (CA), ES - Estuarine Habitat, MA - Marine Habitat, MI - Fish Migration, R1 -Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SH - Shellfish Harvesting, SP - Fish Spawning, WI -Wildlife Habitat

Water

Water Quality Objective/ Water Quality Criterion:

From the Basin Plan: For lagoons and estuaries and all beneficial uses, the maximum increase when Natural Turbidity is 0-50 NTU is 20 % over natural turbidity. The Maximum Increase when Natural Turbidity is 50-100 NTU is 20 ntu. The Maximum Increase when Natural Turbidity is >100 NTU is 10 % over natural turbidity.

Evaluation Guideline:

The transparency of waters in lagoons and estuaries shall not be less than 50% of the depth at locations where measurement is made by means of standard Secchi disk, except where lesser transparency is caused by rainfall runoff from undisturbed natural areas and dredging projects conducted in conformance with waste discharge requirements of the Regional Board. With these two exceptions, increases in turbidity attributable to controllable water quality factors shall not exceed the above limits.

Data Used to Assess Water Quality:

Data were collected by the Tijuana River NERR in 1997 and 1998. There were 14,872 of 18228 samples that had turbidity levels of 20 ntu or lower. There were 3,356 of the 18,228 samples that had turbidity levels of 21ntu or higher. The highest turbidity reading occurred in 02/1998 with a reading of 998 NTU.

Spatial Representation:

Samples were collected at the Tijuana River Estuary site OS.

Temporal Representation:

Samples were collected in 30 minute intervals from 04/01/1997 to 09/29/1997 and 02/13/1998 to 12/31/1998. Samples were collected from 04/1997 to 09/1997 and during every month in 1998 except 01/1998 and 05/1998. Sampling represents at least 2 days in each sampling month, and usually were not collected during all days in the month.

QA/QC Equivalent:

Data used in 2002 assessment.

San Diego Region (9)

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

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Water Segment: Chollas Creek

Pollutant: Cadmium

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 CTR acute criterion and one sample exceeds the chronic criterion. Over 40 measurements are available.

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. One of 42 samples exceeded the chronic criterion and no samples out of the 47 exceeded the acute criterion. These do 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, WI - Wildlife 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 harness 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:

One of 42 samples exceeded the CTR - CCC criteria for dissolved

cadmium (San Diego RWQCB, 2001b).

Spatial Representation: Six stations were sampled throughout the Chollas Creek watershed.

Temporal Representation: Five samples were collected in June 1991 and March 1992. Forty-two

samples were collected as part of the MS4 storm water permit between

February 1994 and February 2003.

Environmental Conditions: Chollas Creek is an urban creek that runs through portions of San Diego,

La Mesa, and Lemon Grove before emptying into San Diego Bay.

Data Quality Assessment: NPDES permit.

Water Segment: Mission Bay Shoreline

Pollutant: Bacteria Indicators

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 delisting status.

Two lines of evidence are available in the administrative record to assess this pollutant. One line of evidence is testimonial, the other is the combined total numeric bacterial indicator results from 45 stations sampled along the Mission Bay shoreline during 1999 to 2003. An insufficient number of total samples taken from stations along Mission Bay shoreline exceed the AB 411 bacteria indicator criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this entire 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 thousand sixteen (2,016) of 17,847 samples taken from 37 stations along the Mission Bay shoreline from 1999 through 2003 exceeded the bacterial indicator criteria and these exceedances do not surpass the allowable frequency listed in Table 4.2 of the Listing Policy. A total of 45 sites were originally monitored along the Mission Bay shoreline. Eight of the 45 sites did not record any exceedances of bacterial indicators.
- 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: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

From AB411: Enterococcus: 35 MPN/100 ml for 30-day average, single sample: 104MPN/100 ml. Fecal coliform: 200 MPN/100 ml 30-day average, single sample- 400 MPN/100mL. Total coliform: 1,000 MPN/100 ml 30-day average, single sample 1000 MPN/100 ml If the fecal is more than 10% of the total coliform MPNs or 10,000 MPN/100ml if the fecal coliform is less than 1% of the total coliform.

Data Used to Assess Water Ouality:

Two thousand sixteen (2,016) of 17,847 taken at 37 stations along the Mission Bay shoreline from 1999 to 2003 exceeded the three bacterial indicators for enterococcus, fecal coliform and total coliform. The AB 411 single sample limits were used to determine the number of exceedances for a given sample size. A single sample was collected on a given day from a site and analyzed for the three indicators producing three different analyses. To asses the number of exceedances at a site, first the data were assessed to determine the total number of analyses for each indicator that exceeded the single sample limit at each site. The number of exceedances for each of the three indicators over the five year period were then

summed for each site (City of San Diego, 2004).

Spatial Representation: Thirty seven sample sites.

Temporal Representation: Samples were taken from 1999 to 2003.

Environmental Conditions: The shoreline of Mission Bay is listed on the 2002 303(d) list in its

entirety. A total of 45 sites were monitored along the Mission Bay

shoreline. Eight of the 45 sites sampled did not record any exceedances of

the bacterial indicators.

Southern California has three distinct weather/hydrological conditions: summer dry weather, winter dry weather, and storm events. The data set used in this analysis includes summer and winter season data. Whether or not storm event samples are included in the data set are not known. For future water quality assessments, the RWQCB may classify bacteria samples as summer dry, winter dry, or storm event samples to ensure adequate representation of all three weather/hydrological conditions.

QA/QC Equivalent: City of San Diego or the County Department of Environmental Health

OA/OC procedures

Line of Evidence Testimonial Evidence

Beneficial Use R1 - Water Contact Recreation Non-Numeric Objective:

From the Basin Plan: For Bays and estuaries and all beneficial uses, the WQO for coliform organisms states that MPN in the upper 60 ft. of water column shall be less than 1,000 per 100 mL (10 per mL); provided that not more than 20% of the samples at any sampling station, in any 30-day period, may exceed 1,000 per 100 mL (10 per mL), and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 mL (100 per mL).

Evaluation Guideline:

REC1- Fecal coliform objective is 200 colonies per 100 mL based on the log mean of no less than 5 samples over 30-day period or no more than 10% of total samples during any 30-day period to exceed 400 colonies per 100 mL.

REC1 -Enterococci steady state in all areas is 35 colonies per 100 mL. Enterococci maximum in designated beaches is 104 colonies per 100 mL. Enterococci maximum in moderately or lightly used areas is 276 colonies per 100 mL. Enterococci maximum in infrequently used areas is 500 colonies per 100 mL.

Data Used to Assess Water Quality:

From the letter from the San Diego Baykeeper written on 06/14/2004: We recommend continued listing of Mission Bay for eutrophication, lead, and bacterial indicators (San Diego Baykeeper, 2004).

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

Temporal Representation: The letter regarding possible impairments was written on 06/14/2004. No other dates were provided.

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Water Segment: Pacific Ocean Shoreline, Miramar Reservoir HA

Pollutant: Bacteria Indicators

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 delisting status.

One line of evidence is available in the administrative record to assess this pollutant. There was only one exceedance of total coliform, fecal coliform and

enterococcus bacteriological standards recorded.

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 may satisfy 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 180 samples exceeded the bacteriological standards for all three indicators and these do 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 bacteriological water quality standards are not

exceeded.

Lines of Evidence:

Line of Evidence Pollutant-Water

Beneficial Use R1 - Water Contact Recreation, R2 - Non-Contact Recreation

Non-Numeric Objective: The objective is numeric.

Evaluation Guideline: From AB411: Enterococcus: 35"per 100 ml for 30-day average", single

sample: 104 per 100 ml. Fecal coliform: 30-day average- 200 colonies/100 mL. Single sample- 400 colonies/100mL. Total coliform: 30-day average: 1,000 colonies/100 mL, single sample: If FC/TC ratio is < 0.1, 10,000 colonies/100 mL, if FC/TC ratio is > 0.1, 1,000 colonies/100mL.

Data Used to Assess Water

Quality:

A total of 180 analyses were performed from 1999 through 2003. Of these, there was only one exceedance of the bacterial standards for all three indicators: The Enterococcus standard of 104 MPN/100mL was

exceeded in 10/2002 (City of San Diego, 2004).

Spatial Representation: Two stations were monitored at Anderson Canyon during this time: one at

the sampling site and one 75 feet to the left of the site.

Temporal Representation: Data were available for this assessment from 01/2002 through 10/2004.

The majority of samples were taken during the dry season, but samples

were also taken during the wet season.

Water Segment: Pacific Ocean Shoreline, Scripps HA

Pollutant: Bacteria Indicators

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 delisting status.

Nine individual lines of evidence are available in the administrative record to

assess this pollutant. An insufficient number of samples exceed the

bacteriological standards to warrant keeping this location on the section 303(d)

list.

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

This conclusion is based on the staff findings that:

- 1. The data used may satisfy 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 214 out of 3,770 samples that exceeded the total coliform, fecal coliform and enterococcus standards and these do 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: R1 - Water Contact Recreation, R2 - Non-Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Bacteria Objective (AB411, 1997): Enterococcus: 35"per 100 ml for 30-day average", single sample: 104 per 100 ml. Fecal coliform: 30-day average- 200 colonies/100 mL. Single sample- 400 colonies/100mL. Total coliform: 30-day average: 1,000 colonies/100 mL, single sample: If FC/TC ratio is < 0.1, 10,000 colonies/100 mL, if FC/TC ratio is > 0.1, 1,000 colonies/100mL.

Data Used to Assess Water Ouality:

A total of 412 analyses were performed from 1999 through 2003. Of these, there were seven exceedances of the bacterial standards for all 3 indicators: 2 exceedances of the fecal coliform standard and one exceedance of the enterococcus standard (City of San Diego, 2004).

Spatial Representation:

Tourmaline Surf Park. This site is located in Pacific Beach near the end of Turquoise Street. Eight stations were monitored at Tourmaline Surf Park during this time: one at the sampling point, five to the left, and two to the right of the site.

Temporal Representation:

Data were available for this assessment from 04/1999 through 05/2003. Samples were collected during the wet and dry seasons, but only limited data were available from 2002 and 2003.

Environmental Conditions:

There were no sewage spills that impacted the Tourmaline Surf Park site from 1999 through 2003.

Southern California has three distinct weather/hydrological conditions: summer dry weather, winter dry weather, and storm events. The data set used in this analysis includes summer and winter season data. Whether or not storm event samples are included in the data set are not known. For future water quality assessments, the RWQCB may classify bacteria samples as summer dry, winter dry, or storm event samples to ensure adequate representation of all three weather/hydrological conditions.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation, R2 - Non-Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Bacterial Objective (AB411, 1997): Enterococcus: 35"per 100 ml for 30-day average", single sample: 104 per 100 ml. Fecal coliform: 30-day average- 200 colonies/100 mL. Single sample- 400 colonies/100mL. Total coliform: 30-day average: 1,000 colonies/100 mL, single sample: If FC/TC ratio is < 0.1, 10,000 colonies/100 mL, if FC/TC ratio is > 0.1,

1,000 colonies/100mL.

Data Used to Assess Water A total of 381 analyses were performed from 1999 through 2003. Of

these, there were only 9 exceedances of the bacterial standards for all 3

Quality: indicators, all of which occurred in 1999 and 2000. Standards were

exceeded for all 3 indicators, but there were no exceedance of any of the 3

indictors during 2003 (City of San Diego, 2004).

Spatial Representation: Windansea Beach at Bonair Street. This site is located at Windansea

Beach in La Jolla at the end of Bonair Street. Seven stations were monitored at Windansea Beach at Bonair St. during this time: one at the

sampling site, three to the left, and three to the right.

Temporal Representation: Data were available for this assessment from 01/2002 through 10/2004,

although only limited data were available for this site from 04/2001 through 04/2003. The majority of samples were taken during the dry

season, but samples were also taken during the wet season.

Environmental Conditions: There was one sewage spill that impacted the Windansea Beach at Bonair

Street site in 01/2001. It did not appear to have an impact on bacterial

indicator levels relative to the standards.

Southern California has three distinct weather/hydrological conditions: summer dry weather, winter dry weather, and storm events. The data set used in this analysis includes summer and winter season data. Whether or not storm event samples are included in the data set are not known. For future water quality assessments, the RWQCB may classify bacteria samples as summer dry, winter dry, or storm event samples to ensure adequate representation of all three weather/hydrological conditions.

Southern California has three distinct weather/hydrological conditions: summer dry weather, winter dry weather, and storm events. The data set used in this analysis includes summer and winter season data. Whether or not storm event samples are included in the data set are not known. For future water quality assessments, the RWQCB may classify bacteria samples as summer dry, winter dry, or storm event samples to ensure adequate representation of all three weather/hydrological conditions.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation, R2 - Non-Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Bacteria Objective (AB411, 1997): Enterococcus: 35"per 100 ml for 30-day average", single sample: 104 per 100 ml. Fecal coliform: 30-day average- 200 colonies/100 mL. Single sample- 400 colonies/100mL. Total coliform: 30-day average: 1,000 colonies/100 mL, single sample: If FC/TC ratio is < 0.1, 10,000 colonies/100 mL, if FC/TC ratio is > 0.1,

1,000 colonies/100mL.

Data Used to Assess Water

Quality:

A total of 604 analyses were performed from 1999 through 2003. Of these, there were 35 exceedances of the bacterial standards for all three indicators. Exceedances occurred for all three bacterial indicators,

particularly in 1999 and 2000. However, there has been only one exceedance of any bacterial standard since 10/2000 (City of San Diego, 2004).

Spatial Representation: Whispering Sands Beach at Ravina Street. This site is located south of

Nicholson Point in La Jolla at Ravina Street. Four stations were monitored at this location during this time: one at the sampling site, one to the left,

and two to the right of the site.

Temporal Representation: Data were available for this assessment from 01/2002 through 10/2004.

The majority of samples were taken during the dry season, but samples were also taken during the wet season, particularly in 1999 and 2000.

Environmental Conditions: There were no sewage spills that impacted this site from 1999 through

2003.

Southern California has three distinct weather/hydrological conditions: summer dry weather, winter dry weather, and storm events. The data set used in this analysis includes summer and winter season data. Whether or not storm event samples are included in the data set are not known. For future water quality assessments, the RWQCB may classify bacteria samples as summer dry, winter dry, or storm event samples to ensure adequate representation of all three weather/hydrological conditions.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation, R2 - Non-Contact Recreation

Matrix: Water

Water Quality Objective/ Bacteria Objective (AB411, 1997): Enterococcus: 35"per 100 ml for 30-day average", single sample: 104 per 100 ml. Fecal coliform: 30-day

day average", single sample: 104 per 100 ml. Fecal coliform: 30-day average- 200 colonies/100 mL. Single sample- 400 colonies/100mL. Total coliform: 30-day average: 1,000 colonies/100 mL, single sample: If FC/TC ratio is < 0.1, 10,000 colonies/100 mL, if FC/TC ratio is > 0.1,

1,000 colonies/100mL.

Data Used to Assess Water

Quality:

A total of 278 analyses were performed from 1999 through 2003. Of these, there were only two exceedances of the bacterial standards for all 3 indicators: The fecal coliform standard was exceeded in 09/2003 and the enterococcus standard was exceeded in 07/2003 (City of San Diego,

2004).

Spatial Representation: South Casa Beach at Coast Blvd. This site is located south of Point La

Jolla at the southern end of Casa Beach. Three stations were monitored at South Casa Beach at Coast Blvd. site during this time: one at the sampling

site, one 75 ft to the left and one 75 ft to the south of the site.

Temporal Representation: Data were available for this assessment from 01/2002 through 10/2004.

All but six of the analyses were conducted during the dry season.

Environmental Conditions: There were no sewage spills that impacted this site from 1999 through

2003.

Southern California has three distinct weather/hydrological conditions: summer dry weather, winter dry weather, and storm events. The data set used in this analysis includes summer and winter season data. Whether or not storm event samples are included in the data set are not known. For future water quality assessments, the RWQCB may classify bacteria samples as summer dry, winter dry, or storm event samples to ensure adequate representation of all three weather/hydrological conditions.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation, R2 - Non-Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Bacteria Objective (AB411, 1997): Enterococcus: 35"per 100 ml for 30-day average", single sample: 104 per 100 ml. Fecal coliform: 30-day average- 200 colonies/100 mL. Single sample- 400 colonies/100mL. Total coliform: 30-day average: 1,000 colonies/100 mL, single sample: If FC/TC ratio is < 0.1, 10,000 colonies/100 mL, if FC/TC ratio is > 0.1, 1.000 colonies/100mL.

Data Used to Assess Water Quality:

A total of 344 analyses were performed form 1999 through 2003. Of these, there were 99 exceedances of the bacterial standards for all three indicators, which equates to nearly 30% of the analyses conducted at this site. In contrast to most other sites, the majority of exceedances occurred for the total coliform and fecal coliform indicators. The Enterococcus standard was exceeded only 4 times during this time period (City of San Diego, 2004).

Spatial Representation:

Casa Beach (Children's Pool): This site is located just south of Point La Jolla at Children's Pool Beach: 12 stations were monitored at Children's Pool during this time: one at the sampling site, two to the left, and nine to the right of the site.

Temporal Representation:

Data were available for this assessment from 01/2002 through 10/2004. The majority of samples were taken during the dry season, but samples were also taken during the wet season.

Environmental Conditions:

There were no sewage spills that impacted the Children's Pool site from 1999 through 2003.

Southern California has three distinct weather/hydrological conditions: summer dry weather, winter dry weather, and storm events. The data set

used in this analysis includes summer and winter season data. Whether or not storm event samples are included in the data set are not known. For future water quality assessments, the RWQCB may classify bacteria samples as summer dry, winter dry, or storm event samples to ensure adequate representation of all three weather/hydrological conditions.

Numeric Line of Evidence Pollu

Pollutant-Water

Beneficial Use:

R1 - Water Contact Recreation, R2 - Non-Contact Recreation

Matrix:

Water

Water Quality Objective/ Water Quality Criterion: Bacteria Objective (AB411, 1997): Enterococcus: 35"per 100 ml for 30-day average", single sample: 104 per 100 ml. Fecal coliform: 30-day average- 200 colonies/100 mL. Single sample- 400 colonies/100mL. Total coliform: 30-day average: 1,000 colonies/100 mL, single sample: If FC/TC ratio is < 0.1, 10,000 colonies/100 mL, if FC/TC ratio is > 0.1, 1,000 colonies/100mL.

Data Used to Assess Water Quality:

A total of 749 analyses were performed from 1999 through 2003. Of these, there were 41 exceedances of the bacterial standards for all three indicators (City of San Diego, 2004).

Spatial Representation:

La Jolla Shores at Avenida De La Playa, This site is located at La Jolla Shores Beach at Avenida Del La Playa: 14 stations were monitored at La Jolla Shores at Avenida De La Playa during this time: one at the sampling sire FM-080-0-M, six as far as 150 ft to the left, and 7 as far as 150 ft to the right of the site.

Temporal Representation:

A total of 749 analyses were performed from 1999 through 2003. Of these, there were 41 exceedances of the bacterial standards for all three indicators.

Environmental Conditions:

There was one sewage spill that impacted the La Jolla Shores at Avenue De La Playa site. There were 12 exceedances associated with the spill.

Southern California has three distinct weather/hydrological conditions: summer dry weather, winter dry weather, and storm events. The data set used in this analysis includes summer and winter season data. Whether or not storm event samples are included in the data set are not known. For future water quality assessments, the RWQCB may classify bacteria samples as summer dry, winter dry, or storm event samples to ensure adequate representation of all three weather/hydrological conditions.

Numeric Line of Evidence

Pollutant-Water

Beneficial Use:

R1 - Water Contact Recreation, R2 - Non-Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Bacteria Objective (AB411, 1997): Enterococcus: 35"per 100 ml for 30-day average", single sample: 104 per 100 ml. Fecal coliform: 30-day average- 200 colonies/100 mL. Single sample- 400 colonies/100mL. Total coliform: 30-day average: 1,000 colonies/100 mL, single sample: If FC/TC ratio is < 0.1, 10,000 colonies/100 mL, if FC/TC ratio is > 0.1, 10,000 colonies/100 mL, if FC/TC ratio is > 0.1,

1,000 colonies/100mL.

Data Used to Assess Water

Ouality:

A total of 84 analyses were performed from 1999 through 2003. Of these, there were 9 exceedances of the bacterial standards for all 3 indicators. All but one occurred in 01/2001 (City of San Diego, 2004).

Spatial Representation: La Jolla Shores at Vallecitos, This site is located at La Jolla Shores Beach

at Vallecits Street: Four stations were monitored at this location during

this time.

Temporal Representation: Data were available for this assessment from 1991 dry season and

sporadic events in 2001 and 2003. The majority of samples were taken during the dry season, but some samples were also taken during the wet

season.

Environmental Conditions: There were no sewage spills that impacted the Vallecits site between

01/1999 and 10/2003.

Southern California has three distinct weather/hydrological conditions: summer dry weather, winter dry weather, and storm events. The data set used in this analysis includes summer and winter season data. Whether or not storm event samples are included in the data set are not known. For future water quality assessments, the RWQCB may classify bacteria samples as summer dry, winter dry, or storm event samples to ensure adequate representation of all three weather/hydrological conditions.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation, R2 - Non-Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Bacterial Objective (AB411, 1997): Enterococcus: 35"per 100 ml for 30-day average", single sample: 104 per 100 ml. Fecal coliform: 30-day average- 200 colonies/100 mL. Single sample- 400 colonies/100mL. Total coliform: 30-day average: 1,000 colonies/100 mL, single sample: If FC/TC ratio is < 0.1, 10,000 colonies/100 mL, if FC/TC ratio is > 0.1,

1,000 colonies/100mL.

Data Used to Assess Water

Quality:

A total of 51 analyses were performed from 1999 through 2003. Of these, there was only one exceedance of the bacterial standards for all three indicators: The enterococcus standard of 104MPN/100mL was exceeded

in September 1999 (City of San Diego, 2004).

Spatial Representation: La Jolla Shores at Caminito Del Oro. This site is located at La Jolla

Shores Beach at El Paseo Grande Street: Four stations were monitored at Caminito Del Oro during this time: one at the center of the sampling site,

two to the left of the site, and one to the right.

Temporal Representation: Data were available for this assessment only from the dry season of 1999

and from two samples taken in the spring of 2003.

Environmental Conditions: There were no sewage spills that impacted the Caminito Del Oro site

between January 1999 and October 2003.

Southern California has three distinct weather/hydrological conditions: summer dry weather, winter dry weather, and storm events. The data set used in this analysis includes summer and winter season data. Whether or not storm event samples are included in the data set are not known. For future water quality assessments, the RWQCB may classify bacteria samples as summer dry, winter dry, or storm event samples to ensure adequate representation of all three weather/hydrological conditions.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation, R2 - Non-Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Bacteria Objective (AB411, 1997): Enterococcus: 35"per 100 ml for 30-day average", single sample: 104 per 100 ml. Fecal coliform: 30-day average- 200 colonies/100 mL. Single sample- 400 colonies/100mL. Total coliform: 30-day average: 1,000 colonies/100 mL, single sample: If FC/TC ratio is $<0.1,\,10,000$ colonies/100 mL, if FC/TC ratio is $>0.1,\,$

1,000 colonies/100mL.

Data Used to Assess Water Quality:

A total of 366 analyses were performed from 1999 through 2003. Of these, there were only 6 exceedances of the bacterial standards fro all 3 indicators: one for total coliform, three for fecal coliform, and two for

enterococcus (City of San Diego, 2004).

Spatial Representation: There were 11 stations that were monitored at the El Paseo Grande site

during this time: the majority were taken at the sampling site and 75 to the

left and right.

Temporal Representation: Data were available for this assessment form 05/1999 through 10/2004.

The majority of samples were taken during the dry season, but samples

were also taken during the wet season in 2001, 2002, and 2003.

Environmental Conditions: Two of the exceedances of Enterococcus standard were associated with a

sewage spill that occurred in March 2001.

Southern California has three distinct weather/hydrological conditions: summer dry weather, winter dry weather, and storm events. The data set used in this analysis includes summer and winter season data. Whether or not storm event samples are included in the data set are not known. For future water quality assessments, the RWQCB may classify bacteria samples as summer dry, winter dry, or storm event samples to ensure adequate representation of all three weather/hydrological conditions.

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation, R2 - Non-Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Bacterial Objective (AB 411, 1997): Enterococcus: 35"per 100 ml for 30-day average", single sample: 104 per 100 ml. Fecal coliform: 30-day average- 200 colonies/100 mL. Single sample- 400 colonies/100mL. Total coliform: 30-day average: 1,000 colonies/100 mL, single sample: If FC/TC ratio is < 0.1, 10,000 colonies/100 mL, if FC/TC ratio is > 0.1, 1,000 colonies/100mL.

Data Used to Assess Water Quality:

A total of 501 analyses were performed from 1999 through 2003. Of these, there were only 3 exceedances of the bacterial standards for all 3 indicators: one for fecal coliform in 2003 and two for enterococcus in 2000 (City of San Diego, 2004).

Spatial Representation:

Pacific Beach at Grand Avenue. This site is located just south of Crystal Pier at Grand Avenue in Pacific Beach. Three stations were monitored at Pacific Beach at Grand Avenue during this time: one at the sampling site, one 75 feet to the left, and one 75 feet to the right of the site.

Temporal Representation:

Data were available for this assessment from April 1999 through October 2003. The majority of samples were taken during the dry season, but samples were also taken during the wet season.

 ${\it Environmental\ Conditions:}$

There were no sewage spills that impacted the Pacific Beach at Grand Avenue site.

Southern California has three distinct weather/hydrological conditions: summer dry weather, winter dry weather, and storm events. The data set used in this analysis includes summer and winter season data. Whether or not storm event samples are included in the data set are not known. For future water quality assessments, the RWQCB may classify bacteria samples as summer dry, winter dry, or storm event samples to ensure adequate representation of all three weather/hydrological conditions.

Line of Evidence

Pollutant-Water

Beneficial Use R1 - Water Contact Recreation, R2 - Non-Contact Recreation

Non-Numeric Objective:

Evaluation Guideline: From AB411: Enterococcus: 35"per 100 ml for 30-day average", single

sample: 104 per 100 ml. Fecal coliform: 30-day average- 200 colonies/100 mL. Single sample- 400 colonies/100mL. Total coliform: 30-day average: 1,000 colonies/100 mL, single sample: If FC/TC ratio is < 0.1, 10,000 colonies/100 mL, if FC/TC ratio is > 0.1, 1,000 colonies/100mL.

Data Used to Assess Water

Quality:

A total of 412 analyses were performed from 1999 through 2003. Of these, there were seven exceedances of the bacterial standards for all 3 indicators: 2 exceedances of the fecal coliform standard and one exceedance of the enterococcus standard (City of San Diego, 2004).

Spatial Representation: Tourmaline Surf Park. This site is located in Pacific Beach near the end of

Turquoise Street. Eight stations were monitored at Tourmaline Surf Park during this time: one at the sampling point, five to the left, and two to the

right of the site."

Temporal Representation: Data were available for this assessment from 04/1999 through 05/2003.

Samples were collected during the wet and dry seasons, but only limited

data were available from 2002 and 2003.

Line of Evidence Pollutant-Water

Beneficial Use R1 - Water Contact Recreation, R2 - Non-Contact Recreation

Non-Numeric Objective:

Evaluation Guideline: From AB411: Enterococcus: 35"per 100 ml for 30-day average", single

sample: 104 per 100 ml. Fecal coliform: 30-day average- 200 colonies/100 mL. Single sample- 400 colonies/100mL. Total coliform: 30-day average: 1,000 colonies/100 mL, single sample: If FC/TC ratio is < 0.1, 10,000 colonies/100 mL, if FC/TC ratio is > 0.1, 1,000 colonies/100mL.

Data Used to Assess Water

Quality:

A total of 381 analyses were performed from 1999 through 2003. Of these, there were only 9 exceedances of the bacterial standards for all 3 indicators, all of which occurred in 1999 and 2000. Standards were exceeded for all 3 indicators, but there were no exceedance of any of the 3

indictors during 2003 (City of San Diego, 2004).

Spatial Representation: Windansea Beach at Bonair St. This site is located at WindanSea Beach in

La Jolla at the end of Bonair Street. Seven stations were monitored at Windansea Beach at Bonair St. during this time: one at the sampling site,

three to the left, and three to the right.

Temporal Representation:

Data were available for this assessment from 01/2002 through 10/2004, although only limited data were available for this site from 04/2001 through 04/2003. The majority of samples were taken during the dry season, but samples were also taken during the wet season.

Line of Evidence

Pollutant-Water

Beneficial Use

R1 - Water Contact Recreation, R2 - Non-Contact Recreation

Non-Numeric Objective:

Evaluation Guideline:

From AB411: Enterococcus: 35"per 100 ml for 30-day average", single sample: 104 per 100 ml. Fecal coliform: 30-day average- 200 colonies/100 mL. Single sample- 400 colonies/100mL. Total coliform: 30-day average: 1,000 colonies/100 mL, single sample: If FC/TC ratio is $<0.1,\,10,000$ colonies/100 mL, if FC/TC ratio is $>0.1,\,1,000$ colonies/100mL.

Data Used to Assess Water Quality:

A total of 344 analyses were performed form 1999 through 2003. Of these, there were 99 exceedances of the bacterial standards for all three indicators, which equates to nearly 30% of the analyses conducted at this site. In contrast to most other sites, the majority of exceedances occurred for the total coliform and fecal coliform indicators. The Enterococcus standard was exceeded only 4 times during this time period (City of San Diego, 2004).

Spatial Representation:

Casa Beach (Children's Pool): This site is located just south of Point La Jolla at Children's Pool Beach: Twelve stations were monitored at Children's Pool during this time: one at the sampling site, two to the left, and nine to the right of the site.

Temporal Representation:

Data were available for this assessment from 01/2002 through 10/2004. The majority of samples were taken during the dry season, but samples were also taken during the wet season.

Water Segment: San Diego Bay Shoreline, Chula Vista Marina

Pollutant: Bacteria Indicators

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 bacteria indicators listing was based on a precautionary posting by the County Health Department and the posting was not backed by any data (section

3.3 of the Listing Policy).

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 bacteria data are 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 it cannot be determined if applicable water quality

standards for the pollutant are exceeded.

Lines of Evidence:

Line of Evidence Testimonial Evidence

Beneficial Use R1 - Water Contact Recreation

Information Used to Assess

Water Quality:

The Chula Vista Marina was placed on the 303(d) list for bacteria indicators in 1998. However, the area that was listed is actually south of the Chula Vista marina, rather than within the marina itself. The area south of the marina was listed in 1998 due to postings by the County

Department of Public Health. According to RWQCB staff, the Health Department posted the area as a precaution because of a nearby storm drain outlet, not because they had data showing elevated bacteria levels. To the knowledge of RWQCB staff, data were never collected from the water body. The RWQCB staff support delisting this site based on the lack of evidence to support the listing.

San Diego Region (9)

Area Change

Recommendations to change the area affected by pollutants on the section 303(d) List

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Water Segment: Chollas 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.

Lines of Evidence:

Line of Evidence -N/A

Beneficial Use R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm

Freshwater Habitat, WI - Wildlife Habitat

Non-Numeric Objective: Map Changes-no objective available.

Data Used to Assess Water

Quality:

Email from James Smith at RWQCB9. "Chollas Creek. Can we add about 0.5 miles of impairment to the Southern Fork? This fork joins the currently listed

portion NW of the I5 / I15 interchange. "

Spatial Representation: Chollas Creek at the Southern Fork

Temporal Representation: The email was sent on 06/03/2004.

Water Segment: Green Valley 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, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, MU - Municipal & Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm

Freshwater Habitat, WI - Wildlife Habitat

Information Used to Assess

Water Quality:

Compared to the old shapefile (from shapefile R9_rivers_2002 303d), the new shapefiles (sent to SWRCB from Mettja Hong at RWQCB9 on 05/06/2003) show that Green Valley Creek was improperly represented in 2002 as being further south and west that it actually is. Please refer to the shapefiles for exact locations of the 2002 and new (2004) representations of Green Valley Creek.

Non-Numeric Objective: Map changes-no objective available.

Data Used to Assess Water

Quality:

From an email from James Smith at RWQCB9: Green Valley Creek is

improperly represented. The correct shapefiles were emailed to you guys on 6

May 03 by Mettja Hong (former intern). Please update.

Spatial Representation: Green Valley Creek

Water Segment: Kit Carson 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, IN - Industrial Service Supply, MU - Municipal &

Domestic, PR - Industrial Process Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Non-Numeric Objective: Map changes - no objective available.

Data Used to Assess Water

Quality:

From an email from James Smith at RWQCB9: Kit Carson Creek is improperly

named San Bernardo Valley.

Spatial Representation: Map name changes address Kit Carson Creek.

Temporal Representation: Email was dated 06/03/2004.

Water Segment: Mission Bay Shoreline

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 CM - Commercial and Sport Fishing (CA), ES - Estuarine Habitat, IN -

Industrial Service Supply, MA - Marine Habitat, MI - Fish Migration, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SH - Shellfish Harvesting, SP - Fish Spawning, WI -

Wildlife Habitat

Non-Numeric Objective: Map changes- no objective.

Data Used to Assess Water

Quality:

From email from James Smith at RWQCB9: Mission Bay should have just the shoreline listed for Bacterial Impairments and just the areas near the mouths of

Rose and Tecolote Creek listed for eutrophic and lead. I understand that this my not be possible due to the constraints of 'one area represented for one water

body' in the system.

Spatial Representation: This map change request affects Mission Bay and the areas of Mission Bay at

the mouths of Rose and Tecolote Creeks.

Temporal Representation: Email from Jim Smith was dated 06/03/2004.

Water Segment: Pacific Ocean Shoreline, San Diego HU

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 AQ - Aquaculture, BI - Preserva.of Bio.Hab.of Spec.Signif., CM - Commercial

and Sport Fishing (CA), IN - Industrial Service Supply, MA - Marine Habitat, MI - Fish Migration, NA - Navigation, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SH - Shellfish

Harvesting, SP - Fish Spawning, WI - Wildlife Habitat

Non-Numeric Objective: Map Changes-no objective available.

Data Used to Assess Water

Quality:

From an email from James Smith at RWQCB9: The stretch of Pacific Ocean Shoreline, at Bermuda Avenue should not be listed. The following was emailed to Adam Morrill on 5 Nov 02: For the listing "Pacific Ocean Shoreline, San Diego HU" the extent of listing should include only Part 1 of 2 and not the more southern stretch identified as Part 2 of 2. If you have not yet digitized the maps, please exclude this southern extent of impairment. The total linear distance

should only be 0.5 miles.

Spatial Representation: Pacific Ocean Shoreline, San Diego HU at Bermuda Avenue.

Temporal Representation: Email is dated 06/03/04.

Water Segment: San Diego River (Lower)

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, IN - Industrial Service Supply, R1 - Water Contact

Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species,

WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Non-Numeric Objective: Map changes- no objective available.

Data Used to Assess Water

Quality:

From an email from James Smith of RWQCB9: The San Diego River should be a continuous line from Carlton Hills Blvd Bridge all the way down to the Pacific

Ocean. The line currently is missing the upper portion and contains 4 other

missing segments.

Spatial Representation: Map change request affects the San Diego River from Carlton Hills Blvd Bridge

to the Pacific Ocean.

Temporal Representation: Email was dated 06/03/2004.

Line of Evidence -N/A

Beneficial Use AG - Agricultural Supply, IN - Industrial Service Supply, R1 - Water Contact

Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species,

WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Non-Numeric Objective: Map changes- no objective available.

Data Used to Assess Water

From email from James Smith at RWQCB9: The upper most portion of the impaired segment of the San Diego River is improperly named Forrester Creek. Quality:

Spatial Representation: Map changes affect the uppermost portion of the impaired segment of the San

Diego River.

Email is dated 06/03/2004. Temporal Representation:

Water Segment: Santa Margarita River (Upper)

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:

CB Staff 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, CO - Cold Freshwater Habitat, IN - Industrial Service

Supply, 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: Map change- no objective available.

Data Used to Assess Water

Quality:

From an email from James Smith at RWQCB9: The upper portion of the Santa

Margarita River (u/s of Rainbow Creek) is improperly named Temecula Creek.

Spatial Representation: Map change request affects the upper Santa Margarita River.

Temporal Representation: Email is dated 06/03/2004.

Water Segment: Tijuana River

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 IN - Industrial Service Supply, R1 - Water Contact Recreation, R2 - Non-

Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater

Habitat, WI - Wildlife Habitat

Non-Numeric Objective: Map Changes-no objective available.

Data Used to Assess Water

Quality:

From an email from James Smith at RWQCB9: The Tijuana River should also

be a continuous line, but it has 2 missing segments.

Spatial Representation: Map change request affects the Tijuana River.

Temporal Representation: Email was dated 06/03/2004.

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