

## STAFF REPORT

# EVALUATION OF DATA AND INFORMATION RELATED TO THE CLEAN WATER ACT SECTION 303(d) LIST OF WATER QUALITY LIMITED SEGMENTS

Water Body Fact Sheets Supporting  
“Do Not Delist” Recommendations



SEPTEMBER 2005

DIVISION OF WATER QUALITY  
STATE WATER RESOURCES CONTROL BOARD  
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

# DRAFT

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STATE WATER RESOURCES CONTROL BOARD  
DIVISION OF WATER QUALITY

STAFF REPORT

EVALUATION OF DATA AND INFORMATION RELATED  
TO THE CLEAN WATER ACT SECTION 303(d)  
LIST OF LIST OF WATER QUALITY LIMITED SEGMENTS

WATER BODY FACT SHEETS SUPPORTING  
THE “DO NOT DELIST” RECOMMENDATIONS

DRAFT  
September 2005



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

***EVALUATION OF DATA AND INFORMATION RELATED TO  
THE CLEAN WATER ACT SECTION 303(d)  
LIST OF WATER QUALITY LIMITED SEGMENTS***

***Water Body Fact Sheets Supporting the  
“Do Not Delist” Recommendations***

This Staff Report summarizes the assessment of data and information that did not result in a recommended change to the section 303(d) list for waters and pollutants already on the list. Data and information used to develop these fact sheets included (1) data used to support the original listing, and (2) new data not previously available.

The staff report contains only those fact sheets where the recommendation is to not remove a water body-pollutant combination from the section 303(d) list. References for all data and information used are presented in Appendix 2 of Volume I of the Staff Report: *Revision of the Clean Water Act Section 303(d) List of Water Quality Limited Segments*.

Fact sheets are included for the following regions:

- North Coast (Region 1)
- San Francisco Bay (Region 2)
- Central Coast (Region 3)
- Los Angeles (Region 4)
- Central Valley (Region 5)
- Lahonton (Region 6)
- Colorado River Basin (Region 7)
- Santa Ana (Region 8)
- San Diego (Region 9)

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Fact Sheets Supporting  
“Do Not Delist” Recommendations



September 2005



## Region 1

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**Water Segment:** Eel River HU, Middle Fork HA

**Pollutant:** Temperature, water

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess temperature consistent with the Listing Policy section 6.1.5.9. A large number of samples exceed the water quality objective. 321 of 339 temperature measurements (total) exceeded the 14.8°C coho guideline and 17.0°C steelhead evaluation guidelines.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 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 a total of 339 temperature samples. 321 temperature samples exceeded the 14.8°C coho and 17.0°C steelhead evaluation guidelines and this exceeds the allowable frequency calculated from the equation in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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*Numeric Line of Evidence* Pollutant-Water

*Beneficial Use:* CO - Cold Freshwater Habitat

*Matrix:* Water

*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: Temperature objectives for COLD interstate waters, WARM interstate waters, and Enclosed Bays and Estuaries are as specified in the "Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays of California" including any revisions thereto. A copy of this plan is included verbatim in the Appendix Section of this Plan. In addition, the following temperature objectives apply to surface waters: The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses. At

no time or place shall the temperature of any COLD water be increased by more than 5 degrees F above natural receiving water temperature. At no time or place shall the temperature of WARM intrastate waters be increased more than 5 degrees F above natural receiving water temperature.

*Evaluation Guideline:*

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

*Data Used to Assess Water Quality:*

The data submitted was for the Middle fork of the Eel River. Three sampling locations were provided. There were a total of 339 samples taken at the three sampling locations from May 27 to September 16, 2003. 321 temperature samples exceeded the 14.8°C coho guideline and 17.0°C steelhead evaluation guideline (North Coast RWQCB, 2003c).

*Spatial Representation:*

There were 3 sampling locations in the Middle Fork Eel River. These locations were: Middle Fork Eel near the mainstream at Rowland Bar, Middle Fork at Cable Creek, and Middle Fork near Dos Rios Bridge.

*Temporal Representation:*

Samples were collected hourly over the period of May 27 to September 16, 2003.

*Environmental Conditions:*

The Middle Fork of the Eel River is currently listed for temperature.

*Data Quality Assessment:*

No QAPP provided. Data collected from the Mendocino County Water Agency.

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## Region 1

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**Water Segment:** Eel River HU, South Fork HA

**Pollutant:** Temperature, water

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess temperature consistent with Listing Policy section 6.1.5.9. A large number of samples exceed the water quality objective. When compared to the 14.8 °C coho threshold, there were 4,184 exceedances out of 10,476 total samples taken over all the sampling years. When compared to the 17.0°C steelhead threshold there were 1,350 exceedances found.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. At a minimum, 4,184 of 10,476 samples exceeded the Sullivan 14.8 °C coho evaluation guideline used to interpret the water quality objective and this exceeds the allowable frequency calculated from the equation in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

---

**Numeric Line of Evidence** Pollutant-Water

**Beneficial Use:** CO - Cold Freshwater Habitat

**Matrix:** Water

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

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

*Evaluation Guideline:*

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

*Data Used to Assess Water Quality:*

When the data was compared to the 14.8°C threshold for coho, there were 4,184 exceedances out of 10,476 total samples taken over all of the years at the sampling locations. When compared to the 17°C threshold for steelhead there were 1,350 exceedances found (Hawthorne Timber Company, 2003).

*Spatial Representation:*

Data was collected in-stream from the Eel River. The sampling sites were located along the main stem of the South Fork Eel River, Indian Creek, Moody Creek, Anderson Creek, Piercy Creek, Standley Creek, Bear Pen Creek, Wildcat Creek, Hollow Tree Creek, Dutch Charlie Creek and Redwood Creek. A total of 10,476 sampling measurements were taken at 13 sampling locations from 1994 to 2003. In-stream and riparian measurements were taken at all monitoring locations.

*Temporal Representation:*

Data was recorded for 10 years, from 1994 through 2003. Water temperature data were recorded at ninety-minute intervals, generally from June until Mid-October. Stream temperatures were measured continuously with temperature data loggers (Onset Computer Corp. model HOBO-Temp and OST temperature loggers) in Class 1 streams throughout the property from 1994 to 2004. Hobo-temps allowed uninterrupted data collection to occur throughout the critical summer period.

*Environmental Conditions:*

The Eel River HU, South Fork HA is currently listed for temperature. The USEPA will develop a TMDL for Eel River, South Fork. Sediment and temperature TMDL's will be developed for the area tributary to and including the South Fork of the Eel River above Garberville and the area tributary to an including the South Fork of the Eel River below Garberville.

*Data Quality Assessment:*

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

## Region 1

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<b>Water Segment:</b>	Eel River HU, Upper Main HA, Lake Pillsbury HSA, Lake Pillsbury
<b>Pollutant:</b>	Mercury
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for removal from 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.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>3. Forty-eight out of 51 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.</li><li>4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
<b>Lines of Evidence:</b>	
<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	North Coast RWQCB Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
<i>Evaluation Guideline:</i>	0.3 ug/g OEHHA Screening Value (Health Advisory for Hg)
<i>Data Used to Assess Water Quality:</i>	Forty-eight out of 51 samples exceeded. Filet composite and individual samples were collected for the following species: largemouth bass collected in 1992-95 and 1999-2001; Sacramento pike minnow collected in 1992-93, 1995, 1999, and 2000; bluegill collected in 1999; and rainbow trout collected in 2000. All but two rainbow trout samples and one Sacramento pike minnow sample exceeded the guideline (TSMP, 2002)
<i>Spatial Representation:</i>	Four stations were sampled: near Lake Pillsbury Resort, along shoreline just

north of the Scott Dam (Dam), in the Eel River Arm (Eel River Arm), and in Horsepasture Gulch near inflow (Horsepasture Gulch).

*Temporal Representation:*

Samples were collected annually in 1992-95 and 1999-2000.

*Data Quality Assessment:*

Toxic Substances Monitoring Program 1992-93 and 1994-95 Data Reports.

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

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## Region 1

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

**Pollutant:** Temperature, water

**Decision:** Do Not Delist

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

Two lines of evidence are available in the administrative record to assess temperature consistent with Listing Policy section 6.1.5.9. A large number of samples exceed the water quality objective. This delisting decision only applies to the section of the Big River at Daugherty Creek, 50 feet above the confluence with the South Fork Big River and 100 feet below Orr Springs Road Bridge. Compared to the 14.8°C threshold there were 2,498 exceedances out of 3,925 samples taken over all of the sampling years at this location. When compared to the 17°C threshold there were 1,686 exceedances out of the 3,925 samples.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. At a minimum 2,498 of 3,925 samples exceeded the 14.8 degree evaluation guideline used to interpret the water quality objective and this exceeds the allowable frequency calculated from the equation in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:**

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<i>Beneficial Use:</i>	CO - Cold Freshwater Habitat
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Temperature objectives for COLD interstate waters, WARM interstate waters, and Enclosed Bays and Estuaries are as specified in the "Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays of California" including any revisions thereto. A copy of this plan is included verbatim in the Appendix Section of this Plan. In addition, the following temperature objectives apply to surface waters: The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased by more than 5°F above natural receiving water temperature. At no time or place shall the temperature of WARM intrastate waters be increased more than 5°F above natural receiving water temperature.
<i>Evaluation Guideline:</i>	The guideline used was from Sullivan et al. (2000) Published Temperature Thresholds-Peer Reviewed Literature which includes reviewed sub-lethal and acute temperature thresholds from a wide range of studies, incorporating information from laboratory-based research, field observations, and risk assessment approaches. This report calculated the 7-day Mean (maximum value of the 7-day moving average of the daily mean temperature) upper threshold criterion for coho salmon as 14.8°C and for steelhead trout as 17.0°C. The risk assessment approach used by Sullivan et al. (2000) suggests that an upper threshold for the for the 7-day average of 14.8°C for coho and 17.0°C for steelhead will reduce average growth 10% from optimum.
<i>Data Used to Assess Water Quality:</i>	The Daugherty Creek near Big River sampling site had 114 total measurements with 108 exceedances of the Sullivan 14.8°C evaluation guideline (Mendocino County Water Agency, 2003). Of these 108 exceedances, 74 exceeded the 17.0°C evaluation guideline. The South Fork Big River site below Orr Springs Road Bridge had 114 total measurements with 108 exceedances of the Sullivan 14.8°C Evaluation guideline. Of these 108 exceedances, 73 exceeded the 17.0°C evaluation guideline (North Coast RWQCB, 2003b).
<i>Spatial Representation:</i>	Samples were taken from two sites. One site was at Daugherty Creek site 50 feet above the confluence with South Fork Big River. The other site was at South Fork Big River 100 feet below the Orr Springs Road Bridge.
<i>Temporal Representation:</i>	Samples were collected hourly from May 23, 2003 through September 7, 2003. MWATs were provided from the hourly data.
<i>Environmental Conditions:</i>	The Big River is currently listed for temperature.
<i>Data Quality Assessment:</i>	No QAPP information was provided. The data were submitted by the Mendocino County Water Agency.

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<i>Beneficial Use:</i>	CO - Cold Freshwater Habitat
<i>Matrix:</i>	Water

*Water Quality Objective/  
Water Quality Criterion:*

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

*Evaluation Guideline:*

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

*Data Used to Assess Water  
Quality:*

When compared to the 14.8 °C coho threshold, were 2,498 exceedances out of 3,925 total samples taken over the all of the sampling years at this location. When compared to the 17°C steelhead threshold there were 1,686 exceedances out of the 3,925 total samples (Hawthorne Timber Co., 2003).

*Spatial Representation:*

There were 7 sampling locations over 9 years. Hobo-Temps were placed in the pools near the bottom and towards the deepest portion to record the in-stream temperatures. In stream and riparian measurements were taken at all monitoring locations.

*Temporal Representation:*

Data was recorded for 1994,1995,1996,1998,1999, 2000, 2001, 2002, and 2003. Water temperature data were recorded at ninety-minute intervals, generally from June until Mid-October. Stream temperatures were measured continuously with temperature data loggers (Onset Computer Corp. model HOBO-Temp and OST temperature loggers) in Class 1 streams throughout the property from 1994 to 2003. Hobo-temps allowed uninterrupted data collection to occur throughout the critical summer period.

*Environmental Conditions:*

Mendocino Coast HU, Big River HA, Big River is currently listed for temperature on the Section 303(d) List. For the 2002 listing submittal data was collected over 4 years (1996-2000), with at least two years of record at 15 locations. Data showed exceedances of the Basin Plan Water Quality Objectives and the Sullivan 2000 Published Temperature Thresholds-Peer Reviewed Literature. The most sensitive beneficial uses supported by the Big River include uses associated with the cold water fishery and municipal and domestic supply. The Big River provides habitat for coho salmon and steelhead trout, which are listed as a threatened species under the federal Endangered Species Act. Populations of coho salmon and steelhead trout in the Big River are extremely low compared to historical levels. Recent (1996-2000) temperature data gathered in the Big River watershed indicate that high temperature levels may be a source of impairment of cold water fisheries in the river. This listing is specific to the area of the watershed from the confluence with the North Fork Big River,

including the watersheds of the mainstem Big and the North Fork Big.

*Data Quality Assessment:*

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

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## Region 1

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

**Pollutant:** Temperature, water

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess temperature consistent with Listing Policy section 6.1.5.9. A large number of samples exceed the water quality objective. When compared to the 14.8 °C threshold, were 10,776 exceedances out of 41,187 total samples taken over all the sampling years at this location. When compared to the 17°C threshold there were 639 exceedances found.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. At a minimum 10,776 of 41,187 samples exceeded the Sullivan 14.8 degree coho evaluation guideline selected to interpret the water quality objective and this exceeds the allowable frequency calculated from the equation in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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**Numeric Line of Evidence** Pollutant-Water

**Beneficial Use:** CO - Cold Freshwater Habitat

**Matrix:** Water

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

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

*Evaluation Guideline:*

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

*Data Used to Assess Water Quality:*

When compared to the 14.8 °C coho threshold, there were 10,776 exceedances out of 41,187 total samples taken over all the sampling years at this location. When compared to the 17°C steelhead threshold there were 639 exceedances found (Hawthorne Timber Co., 2003).

*Spatial Representation:*

Data was collected from the North Fork, Clark Fork, South Fork and mainstem of the Ten Mile River. Sampling measurements were taken from a total of 54 instream sampling locations. Hobo-Temps were placed in the pools near the bottom and towards the deepest portion to record the in-stream temperatures. In stream and riparian measurements were taken at all monitoring locations.

*Temporal Representation:*

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

*Environmental Conditions:*

Mendocino Coast HU, Rockport HA, Ten Mile River HSA is currently listed for temperature. It was placed on the list during the 2002 listing cycle. The data showed that 31 out of the 37 locations exceeded the standards and uses of the Basin Plan Water Quality Objectives and Sullivan 2000 Published Temperature Thresholds-Peer Reviewed Literature.

*Data Quality Assessment:*

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

## Region 1

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**Water Segment:** Russian River HU, Middle Russian River HA, Geyserville HSA

**Pollutant:** Turbidity

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section 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 insufficient 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. Ten of the 18 samples exceeded the evaluation guideline used to interpret the water quality objective. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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***Numeric Line of Evidence*** Pollutant-Water

***Beneficial Use:*** CO - Cold Freshwater Habitat

***Matrix:*** Water

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

***Evaluation Guideline:*** The evaluation guideline that has been used to determine turbidity exceedance is from published-peer reviewed paper, "The Effects of Chronic Turbidity on Density and Growth of Steelheads and Coho Salmon", John W Sigler (1984).

The guideline is "In our studies, as little as 25 NTUs of turbidity caused a reduction in fish growth."

*Data Used to Assess Water Quality:*

By combining the data from the three sampling sites there were 10 samples out of the 18 samples that were above the evaluation guideline. The exceedances ranged from 30.5 NTU up to 356 NTU (Sandler, 2004).

*Spatial Representation:*

There were three sampling locations along the Russian River, one at Healdsburg, and two at Cloverdale. They are as follows:

- Sample site RUS070 is located at the Healdsburg Veteran's beach, Healdsburg.
- Sample site RUS080 is located at the Cloverdale 1st St. bridge, Cloverdale.
- Sample site RUS090 is located at the Cloverdale River Park, Cloverdale.

*Temporal Representation:*

RUS070 was sampled once a month January through April 2003. RUS080 and RUS090 were sampled once a month, January through May 2003, and in July and August 2003. Samples were taken on the same days of the month at each location.

*Data Quality Assessment:*

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

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## Region 1

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

**Pollutant:** Oxygen, Dissolved

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. The data collected from 1995-2001 had 1612 of 1792 samples that were below the minimum dissolved oxygen objective. The data from 2003 had 6 of 9 samples at one location, and 1 of 2 samples at the other locations, that were below the minimum dissolved oxygen objective. These samples exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<b><i>Beneficial Use:</i></b>	CO - Cold Freshwater Habitat
<b><i>Matrix:</i></b>	Water
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	Basin Plan: Dissolved oxygen- is 7.0mg/L as a minimum; and the water must meet the 50% Upper Limit of 10 mg/L and 90% Upper Limit of 7.5 mg/L.
<b><i>Data Used to Assess Water Quality:</i></b>	The total number of samples taken were 1792 with 1612 samples below the Dissolved Oxygen water quality objective (SWRCB, 2003).
<b><i>Spatial Representation:</i></b>	Data were collected at 4 points along the water body.
<b><i>Temporal Representation:</i></b>	The data were collected over 5 to 6 years between 1995 and 2001 over 4

seasons.

*Data Quality Assessment:* Data came from the NCRWQCB 2002 Listing Update.

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***Numeric Line of Evidence*** Pollutant-Water

*Beneficial Use:* CO - Cold Freshwater Habitat

*Matrix:* Water

*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: Dissolved oxygen- is 7.0mg/L as a minimum; and the water must meet the 50% Upper Limit of 10 mg/L and 90% Upper Limit of 7.5 mg/L.

*Data Used to Assess Water  
Quality:* At sampling station LAG030 5 out of 9 samples were below the minimum 7.0 mg/L objective, this sampling locations samples were in exceedance Upper Limit 50% and Upper Limit 90% objectives as well. At sampling station LAG040 1 out of 2 samples were below the minimum 7.0 mg/L objective. At sampling station LTL010 1 out of 2 samples were below the minimum 7.0 mg/L objective. At sampling station LAG050 the only sample was below the minimum 7.0 mg/L objective (Sandler, 2004).

*Spatial Representation:* There are 5 sampling locations for Laguna de Santa Rosa. Sampling station LAG030 is located at Permanent gage behind Community Center in Sebastopol. Sampling station LAG040 is located at By bridge at Todd Rd. South of Sebastopol. Sampling station LTL010 is located at North of LAG050 on Llano Rd., by bridge. Sampling station LAG050 is located at By bridge at Llano Road south of Sebastopol.

*Temporal Representation:* Sampling station LAG030 was sampled once a month, with one measurement for that day of the month during 2003, with no samples collected for May, July and September. Sampling station LAG040 was sampled once in June and once in August 2003. Sampling station LTL010 was sampled once in June and once in August 2003. Sampling station LAG050 was sampled once in June 2003.

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

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## Region 1

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

**Pollutant:** Turbidity

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. The data collected from 2003 had 8 of 15 samples that were in exceedance of the turbidity evaluation guideline used to interpret the water quality objective. These samples exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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***Numeric Line of Evidence*** Pollutant-Water

***Beneficial Use:*** CO - Cold Freshwater Habitat

***Matrix:*** Water

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

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

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

*Data Used to Assess Water Quality:*

There were 15 turbidity samples taken in total, of those there were 8 samples that were above the Sigler turbidity evaluation guideline of 25 NTU. Each sampling location had at least one sample in exceedance, above the evaluation guideline (Sandler, 2004).

*Spatial Representation:*

There were 4 sampling locations for Laguna de Santa Rosa. Sampling station LAG030 is located at permanent gage behind Community Center in Sebastopol. Sampling station LAG040 is located by bridge at Todd Rd. South of Sebastopol. Sampling station LTL010 is located north of LAG050 on Llano Rd., by bridge. Sampling station LAG050 is located by bridge at Llano Road south of Sebastopol.

*Temporal Representation:*

Sampling station LAG030 was sampled once a month for ten months in 2003, no samples were taken in May and September. Sampling station LAG040, LAG050, and LTL010 were sampled once a month in June and August 2003.

*Data Quality Assessment:*

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

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## Region 1

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**Water Segment:** Russian River HU, Middle Russian River HA, Warm Springs HAS

**Pollutant:** Turbidity

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. One of the samples exceed the evaluation guideline. The number of samples is insufficient to determine exceedance with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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 two samples exceeded the evaluation guideline used to interpret the water quality objective. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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**Numeric Line of Evidence** Pollutant-Water

**Beneficial Use:** CO - Cold Freshwater Habitat

**Matrix:** Water

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

material that causes nuisance or adversely affect beneficial uses.

*Evaluation Guideline:*

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

*Data Used to Assess Water Quality:*

One sample was taken on 1/13/2003 at 45.7 NTU, which is above the Sigler turbidity evaluation guideline of 25 NTU. The other sample was taken on 3/16/2003 at 21.3 NTU below the guideline. Of the two samples one exceeded the guideline (Sandler, 2004).

*Spatial Representation:*

Sampling was limited to Mill Creek, a tributary to the Russian River. Samples were taken at 2563 Mill Creek Rd., Healdsburg. There were two samples taken from Mill Creek at this one sampling location.

*Temporal Representation:*

Samples were taken in January and March 2003.

*Environmental Conditions:*

Warm Springs HSA is currently listed for sedimentation as part of the Russian River HU, Middle Russian River HA, Dry Creek HSA listing for sedimentation/siltation. This segment will be addressed in the Russian River Sedimentation/Siltation TMDL.

*Data Quality Assessment:*

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

## Region 1

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**Water Segment:** Russian River HU, Middle Russian River HA, Warm Springs HSA, Lake Sonoma [Reservoir]

**Pollutant:** Mercury

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from 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 insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-three out of 28 samples exceeded the OEHHHA Screening Value and this exceeds the allowable frequency listed in Table 4.1 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 not be removed from 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:

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***Numeric Line of Evidence***

Pollutant-Tissue

***Beneficial Use:***

CM - Commercial and Sport Fishing (CA)

***Matrix:***

Tissue

***Water Quality Objective/  
Water Quality Criterion:***

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

***Evaluation Guideline:***

0.3 ug/g (OEHHHA Screening Value).

***Data Used to Assess Water  
Quality:***

Twenty-three out of 28 samples exceeded. Filet composite and individual samples were collected for the following species: largemouth bass collected in 1992-93, 1995-97, and 2000-01; redear sunfish collected in 1993 and 2001; and black crappie collected in 2001. All but three redear sunfish (2001) samples and two black crappie samples exceeded the guideline (TSMP, 2002).

***Spatial Representation:***

Three stations were sampled: from the Rockpile Road Bridge upstream 1/2 mile

in the Warm Springs Creek arm, in Dry Creek Arm about 3 miles upstream Warm Springs Dam, and at mouth of Warm Springs Creek.

*Temporal Representation:*

Samples were collected annually in 1992-93, 1995-97 and 2000-01.

*Data Quality Assessment:*

Toxic Substances Monitoring Program 1992-93 and 1994-95 Data Reports.

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

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

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## Region 1

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**Water Segment:** Russian River HU, Upper Russian River HA, Coyote Valley HSA, Lake Mendocino [Reservoir]

**Pollutant:** Mercury

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from 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 insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of the 16 samples exceeded the OEHHA Screening Value but the number of samples is insufficient to determine with the confidence and power required by 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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***Numeric Line of Evidence***

Pollutant-Tissue

***Beneficial Use:***

CM - Commercial and Sport Fishing (CA)

***Matrix:***

Tissue

***Water Quality Objective/  
Water Quality Criterion:***

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

***Evaluation Guideline:***

0.3 ug/g (OEHHA Screening Value)

***Data Used to Assess Water Quality:***

Nine out of 16 samples exceeded. Seven file composite samples of largemouth bass, 4 file individual samples of channel catfish, 2 file individual samples of rainbow trout, 2 file composite redear sunfish, and 1 individual sample of striped bass were collected. Largemouth bass were collected in 1993, 2000-01, channel catfish, rainbow trout, striped bass in 2001, and redear sunfish in 1992-93. Six largemouth bass samples, 2 channel catfish samples, and the striped bass sample exceeded the guideline (TSMP, 2002).

*Spatial Representation:* Two stations were sampled: in the Marina off Highway 20 on the north end of the lake and in cove to the east across from dam (South End).

*Temporal Representation:* Samples were collected annually in 1992-93, 1999, and 2001.

*Data Quality Assessment:* Toxic Substances Monitoring Program 1992-93 Data Report.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish and Game.  
Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish and Game.

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# Fact Sheets Supporting “Do Not Delist” Recommendations



September 2005



## Region 2

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**Water Segment:** Butano Creek  
**Pollutant:** Sedimentation/Siltation  
**Decision:** Do Not Delist  
**Weight of Evidence:** This pollutant is being considered for delisting under sections 4.9 and 4.11 of the Listing Policy.

Six lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.9, the measurements of benthic community and fish habitat indicate that biological resources are likely not impacted. Only one site was rated marginal for fish habitat and only one sample was rated poor for benthic community. Even though sedimentation continues, its effects are being reduced. Summer measurements of turbidity do not exceed guidelines for the protections of salmonids. There is limited habitat for Coho because of the lack of deep pools, spawning gravels, and large woody debris.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Even though only one fish habitat sample was found to be marginal and one benthic community sample was found to be poor, there are still potential impacts on Coho related to lack of suitable spawning habitat.
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:

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**Numeric Line of Evidence** Population/Community Degradation  
**Beneficial Use:** CO - Cold Freshwater Habitat, WA - Warm Freshwater Habitat  
**Matrix:** -N/A  
**Water Quality Objective/  
Water Quality Criterion:** Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses

<i>Data Used to Assess Water Quality:</i>	<p>One of 4 fish habitat assessments was considered poor habitat quality.</p> <p>Assessments of physical habitat quality, biotic conditions, pool habitat quality, and water quality in the Pescadero-Butano watershed revealed the following overall fisheries habitat conditions currently present in the watershed: (1) Accessible salmonid habitat is fairly abundant throughout the watershed, (2) salmonid habitat quality is higher in the mid and upper Pescadero Creek watershed and lower in the Butano Creek watershed as well as the low gradient reaches of Pescadero Creek, (3) pool habitat is fairly abundant but of limited depth and suboptimal cover, (4) water quality throughout both watersheds is generally adequate for salmonids and other aquatic organisms.</p> <p>The primary limiting factors with regards to salmonid habitat, based on the sampled reaches, are generally shallow pool depths, limited amounts and frequency of large woody debris, and relatively high levels of fine sediments. These limiting factors are likely to be of greater significance to coho salmon than steelhead. Coho in particular require deep pools with low water velocities and adequate cover for survival and growth while steelhead are more adapted to occupying and foraging in the faster and shallower areas of stream channels. Thus, current habitat conditions in the watershed favor steelhead over coho salmon (SWAMP, 2004).</p>
<i>Spatial Representation:</i>	Four stations.
<i>Temporal Representation:</i>	Samples collected in 2002 and 2003.
<i>Data Quality Assessment:</i>	SWAMP and DFG quality assurance.

<b><i>Numeric Line of Evidence</i></b>	Population/Community Degradation
<i>Beneficial Use:</i>	CO - Cold Freshwater Habitat, WA - Warm Freshwater Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses (SFBRWQCB, 1995).
<i>Evaluation Guideline:</i>	Bioassessment protocols from the following publication were used (California Department of Fish and Game, 1999).
<i>Data Used to Assess Water Quality:</i>	<p>Metric values from 4 sample sites for taxonomic richness, dominant taxon, members of three major benthic invertebrate families, a sensitive taxa index, the Shannon Diversity index, and tolerance value were scored and the 132 scores (6 scores for each sample site) summed to derive total scores for each site. Total scores were then used to assign "poor," "fair," "good," or "excellent" condition grades to each site along the Creek (Environmental Science Associates, 2004).</p> <p>Total sample site scores ranged from 6 to 22. The average score was 16, which is equivalent to a "fair" rating. One site was rated "poor." Three sites were rated "good." There were no "fair-" or "excellent-" rated sites.</p>
<i>Spatial Representation:</i>	4 sample sites along the Creek (14 total Pescadero and Butano SWAMP program sites were used.)
<i>Temporal Representation:</i>	SWAMP assessment made in April 2002. DFG assessments made in 1995.

ESA (Environmental Science Associates) survey made in summer (August 21 to September 24) 2003.

*Environmental Conditions:* April 2002 SWAMP data is not directly comparable to summer 2003 data. Habitat conditions in summer 2003 were evaluated at each site.

*Data Quality Assessment:* California Stream Bioassessment Protocols (CDFG 1999) used (in 2002 and 2003 surveys).

***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:* Basin Plan: Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases from normal background light penetration or turbidity relatable to waste discharge shall not be greater than 10 percent in areas where natural turbidity is greater than 50 NTU). The suspended sediment load and suspended sediment discharge rate of surface waters shall not cause nuisance or adversely affect beneficial uses (SFBRWQCB, 1999).

*Evaluation Guideline:* Turbidity can be used to estimate the effects of sedimentation. Published sedimentation thresholds can be used. The evaluation guideline that has been selected to determine turbidity exceedance is from published-peer reviewed paper, "The Effects of Chronic Turbidity on Density and Growth of Steelheads and Coho Salmon", (Sigler, et.al.,1984). The guideline is as follows "In our studies, as little as 25 NTUs of turbidity caused a reduction in fish growth." (NTU is nephelometric turbidity units). Sigler also discusses the result of turbidities in the 25-50 NTU range reduced growth and caused more newly emerged salmonids to emigrate from laboratory streams than did clear water. Studies indicate that juvenile coho salmon avoided water with turbidities that exceeded 70 NTU (Bilson and Bilby, 1982). Other research reported that feeding and territorial behavior of juvenile coho salmon were disrupted by short-term exposures (2.5-4.5 days) to turbid water with up to 60 NTU (Meehan, 1991).

*Data Used to Assess Water Quality:* Zero of 3 samples exceeded the standard (Environmental Science Associates, 2004).

*Spatial Representation:* Three sample sites along Creek.

*Temporal Representation:* ESA (Environmental Science Associates) survey made in summer (August 21 to September 24, 2003).

*Data Quality Assessment:* California Stream Bioassessment Protocols (CDFG 1999) (for supplemental information) used.

***Line of Evidence*** Testimonial Evidence

*Beneficial Use* CO - Cold Freshwater Habitat, WA - Warm Freshwater Habitat

*Information Used to Assess* From the RWQCB: (1) There is little suitable habitat at present within the creek

*Water Quality:* for coho salmon, and primary hypothesized limiting factors (for coho) are lack of good cover and deep pools, the second factor of which is in part related to an abundant total and fine sediment supply;  
(2) Coho salmon are state listed as endangered south of the Golden Gate, and federally listed as threatened. Two-of-three brood years are believed to be extinct within Pescadero and Butano Creeks, and the third brood year appears to have a tenuous presence.  
(3) Although the steelhead trout run in both creeks does not appear to be immediately threatened by local extinction, run-size is substantially reduced from historical values by a variety of limiting factors including a lack of large woody debris and substantial increase in total and fine sediment supply.

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***Line of Evidence***

Testimonial Evidence

*Beneficial Use*

CO - Cold Freshwater Habitat, WA - Warm Freshwater Habitat

*Information Used to Assess Water Quality:*

In 1998 a letter was sent to RWQCB staff from the California Department of Fish and Game requesting that several waters be added to the section 303(d) list because of the threats to Coho salmon and steelhead. The letter states:

"...The Federal listing of both Coho salmon and steelhead as threatened species confirms the grave condition of these economically and intrinsically valuable fish populations. ...If these species are to survive, we must act now to improve aquatic habitat where it is most critical, namely in major rivers tributary to the Bay and ocean."

The letter goes on to identify siltation as a problem in Pescadero and Butano Creeks. No data are provided or analyzed to support the conclusion that siltation is a water quality problem.

*Non-Numeric Objective:*

Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses (SFBRWQCB, 1995).

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***Line of Evidence***

Pollutant-Sediment

*Beneficial Use*

CO - Cold Freshwater Habitat, WA - Warm Freshwater Habitat

*Information Used to Assess Water Quality:*

From the RWQCB: More than 80 percent of the estimated total sediment delivery to the channel network during the past two decades is associated with human land use activities. Much of this sediment is controllable (gullies associated with historical hillside agriculture, active and abandoned rural earth-surfaced roads, etc.).

*Non-Numeric Objective:*

Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

Waters shall not contain substances in concentrations that result in the deposition of material that cause nuisance or adversely affect beneficial uses.



## Region 2

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**Water Segment:** Central Basin, San Francisco (part of SF Bay, Central)

**Pollutant:** Mercury

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for delisting under sections 4.6 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, it cannot be determined if the site has significant sediment toxicity or whether the pollutant is likely to cause or contribute to any toxic effect.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies, with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. None of 3 samples exceeded the 2.1 ug/g sediment quality guideline, 1 of 2 samples exhibit toxicity, and these do not meet the minimum data required for delisting as presented in Table 4.1 of the Listing Policy.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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*Numeric Line of Evidence* Toxicity

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

<i>Evaluation Guideline:</i>	BPTCP Reference envelope approach.
<i>Data Used to Assess Water Quality:</i>	Significant amphipod toxicity in 1 of 2 tests. Urchin toxicity in 1 of 2 samples (Hunt et al.,1998-b).
<i>Spatial Representation:</i>	Data was synoptically collected with chemical measurements.
<i>Temporal Representation:</i>	Samples collected in December 1995 and April 1997. Temporal distribution of samples is described in the report: Sediment quality and biological effects of San Francisco Bay (Bay Protection and Toxic Cleanup Program), data August 1998.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Sediment
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	Sediment quality guideline of 2.1 ug/g used (PTI Environmental Services, 1991).
<i>Data Used to Assess Water Quality:</i>	None of 3 samples exceed the sediment quality guideline. Previous BPTCP analyses used a guideline that was a factor of 3 lower than the guideline used in the current analysis (Hunt et al., 1998b).
<i>Spatial Representation:</i>	Data was synoptically collected with toxicity measurements.
<i>Temporal Representation:</i>	Samples collected in December 1995 and April 1997. Temporal distribution of samples is described in the report: Sediment quality and biological effects of San Francisco Bay (Bay Protection and Toxic Cleanup Program), data August 1998.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

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## Region 2

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<b>Water Segment:</b>	Central Basin, San Francisco (part of SF Bay, Central)
<b>Pollutant:</b>	Polycyclic Aromatic Hydrocarbons (PAHs) (Aquatic Ecosystems)
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for delisting under sections 4.6 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, it cannot be determined if the site has significant sediment toxicity or whether the pollutant is likely to cause or contribute to any toxic effect.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The sediment quality guideline used complies, with the requirements of section 6.1.3 of the Policy.</li><li>2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>4. One of 3 samples exceeded the sediment guideline, 1 of 2 samples exhibit toxicity, and these do not meet the minimum data required for delisting as presented in Table 4.1 of the Listing Policy.</li><li>5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.
<b>Lines of Evidence:</b>	

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<b><i>Numeric Line of Evidence</i></b>	Toxicity
<b><i>Beneficial Use:</i></b>	ES - Estuarine Habitat
<b><i>Matrix:</i></b>	Sediment
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	<p>All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.</p> <p>There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.</p>

<i>Evaluation Guideline:</i>	BPTCP Reference envelope approach.
<i>Data Used to Assess Water Quality:</i>	Significant amphipod toxicity in 1 of 2 tests. Urchin toxicity in 1 of 2 samples (Hunt et al.,1998-b).
<i>Spatial Representation:</i>	Data was synoptically collected with chemical measurements.
<i>Temporal Representation:</i>	Samples collected in December 1995 and April 1997. Temporal distribution of samples is described in the report: Sediment quality and biological effects of San Francisco Bay (Bay Protection and Toxic Cleanup Program), data August 1998.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Sediment
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	Effects Range-Median for high molecular weight PAHs of 9,600 ng/g was used (Long et al., 1995). Probable Effects Level for low molecular weight PAHs of 1,442 ng/g was used (MacDonald et al., 1996).
<i>Data Used to Assess Water Quality:</i>	One of 3 samples exceeded the guideline for low molecular weight PAHs. One of 3 samples exceeded the guideline for high molecular weight PAHs (Hunt et al., 1998b).
<i>Spatial Representation:</i>	Data was synoptically collected with toxicity measurements.
<i>Temporal Representation:</i>	Samples collected in December 1995 and April 1997. Temporal distribution of samples is described in the report: Sediment quality and biological effects of San Francisco Bay (Bay Protection and Toxic Cleanup Program), data August 1998.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

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## Region 2

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<b>Water Segment:</b>	Islais Creek
<b>Pollutant:</b>	Ammonia
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for removal from the section 303(d) list under sections 4.6 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess delisting status.</p> <p>Five lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant sediment toxicity and the pollutant concentration not exceeds the sediment guideline. The Consolidated Plan is not sufficiently developed to address this problem.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.</li><li>2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>4. All samples exceeded the sediment guideline and all samples exhibit toxicity. This exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.</li><li>5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
<b>Lines of Evidence:</b>	

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<b><i>Numeric Line of Evidence</i></b>	Toxicity
<b><i>Beneficial Use:</i></b>	ES - Estuarine Habitat, MA - Marine Habitat
<b><i>Matrix:</i></b>	Sediment
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms (SFBRWQCB, 1995).
<b><i>Evaluation Guideline:</i></b>	BPTCP Reference envelope approach used (SWRCB, 1997).

*Data Used to Assess Water Quality:* Significant amphipod toxicity in 3 of 4 samples (75%), Significant urchin toxicity in 4 of 5 samples (80%) (Hunt et al., 1998b).

*Spatial Representation:* Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.

*Temporal Representation:* Data was collected from 9/94 - 9/97.

*Data Quality Assessment:* BPTCP Quality Assurance Project Plan (Stephenson et al., 1994).

***Numeric Line of Evidence*** Toxicity

*Beneficial Use:* ES - Estuarine Habitat, MA - Marine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms (SFBRWQCB, 1995).

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

*Evaluation Guideline:* BPTCP Reference envelope approach used.

*Data Used to Assess Water Quality:* Significant amphipod toxicity in 7 of 18 samples (Battelle Memorial Institute, 2002).

*Spatial Representation:* Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.

*Temporal Representation:* Data were collected between 1998 and 2000.

*Environmental Conditions:* Samples were collected in both wet and dry seasons.

*Data Quality Assessment:* Methods used were equivalent to those used in the BPTCP QAPP (Stephenson, et al., 1994). All reported data met QA requirements.

***Numeric Line of Evidence*** Population/Community Degradation

*Beneficial Use:* ES - Estuarine Habitat, MA - Marine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

*Evaluation Guideline:* Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. the index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors

	are negatively impacting the benthic community.
<i>Data Used to Assess Water Quality:</i>	Relative benthic index = 0.22, 0.25, 0.43 (3 benthic gradient samples) (Hunt et al., 1998b).
<i>Spatial Representation:</i>	Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.
<i>Temporal Representation:</i>	Data was collected from 9/94 - 9/97.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

<b><i>Numeric Line of Evidence</i></b>	Pollutant-Sediment
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	Effect thresholds for BPTCP toxicity test protocols (unionized ammonia) Purple Urchin Development NOEC 0.07 mg/L (Bay et al., 1993) Purple Urchin Fertilization NOEC >1.4 mg/L (Bay et al., 1993)
<i>Data Used to Assess Water Quality:</i>	Two samples exceeding the thresholds in two total measurements using purple sea urchin tests (Hunt et al., 1998a).
<i>Spatial Representation:</i>	Data was concurrently collected from samples tested for toxicity.
<i>Temporal Representation:</i>	Data was collected in September 1994.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	Reference envelope approach was used.
<i>Data Used to Assess Water Quality:</i>	Two samples, both showed significant toxicity in purple urchin tests (Hunt et al., 1998a).
<i>Spatial Representation:</i>	Samples taken from one location.

*Temporal Representation:* Samples collected in September 1994.  
*Data Quality Assessment:* BPTCP Quality Assurance Project Plan.

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***Line of Evidence*** Remedial Program in Place  
*Beneficial Use* ES - Estuarine Habitat  
*Information Used to Assess Water Quality:* The BPTCP Consolidated Toxic Hot Spots Cleanup Plan presents a variety of corrective actions that need to be completed in order for the cove to be remediated. Responsible parties have been identified.

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## Region 2

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<b>Water Segment:</b>	Islais Creek
<b>Pollutant:</b>	Chlordane
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for removal from the section 303(d) list under sections 4.6 and 4.10 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess delisting status while under section 4.10, a minimum of two lines of evidence are needed to assess listing status.</p> <p>Six lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant sediment toxicity and the pollutant concentration not exceeds the sediment guideline. The benthic community is impacted.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.</li><li>2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>4. Nineteen of 49 samples exceeded the 6 ng/g ERM sediment quality guideline, 14 of 27 samples exhibit toxicity, and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy. The benthic community in this water body is impacted and this pollutant is associated with this impact.</li><li>5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
<b>Lines of Evidence:</b>	

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<i>Numeric Line of Evidence</i>	Pollutant-Sediment
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

	There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	ERM of 6 ng/g used (Long and Morgan, 1990).
<i>Data Used to Assess Water Quality:</i>	One of 3 samples exceeded ERM (Hunt et al, 1998b).
<i>Spatial Representation:</i>	Data was collected at same locations as benthic community and toxicity samples.
<i>Temporal Representation:</i>	Data was collected in 1997.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

<b><i>Numeric Line of Evidence</i></b>	Pollutant-Sediment
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	ERM of 6 ng/g used (Long and Morgan, 1990).
<i>Data Used to Assess Water Quality:</i>	Eighteen of 46 samples exceed the ERM (Battelle Memorial Institute, 2002).
<i>Spatial Representation:</i>	Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.
<i>Temporal Representation:</i>	Data were collected between 1998 and 2000.
<i>Data Quality Assessment:</i>	Methods used were equivalent to those used in the BPTCP QAPP. All reported data met QA requirements.

<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat, MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms (SFBRWQCB, 1995).
<i>Evaluation Guideline:</i>	BPTCP Reference envelope approach used (SWRCB, 1997).
<i>Data Used to Assess Water Quality:</i>	Significant amphipod toxicity in 3 of 4 samples (75%), Significant urchin toxicity in 4 of 5 samples (80%) (Hunt et al., 1998b).

*Spatial Representation:* Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.

*Temporal Representation:* Data was collected from 9/94 - 9/97.

*Data Quality Assessment:* BPTCP Quality Assurance Project Plan (Stephenson et al., 1994).

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***Numeric Line of Evidence*** Toxicity

*Beneficial Use:* ES - Estuarine Habitat, MA - Marine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms (SFBRWQCB, 1995).

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

*Evaluation Guideline:* BPTCP Reference envelope approach used.

*Data Used to Assess Water Quality:* Significant amphipod toxicity in 7 of 18 samples (Battelle Memorial Institute, 2002).

*Spatial Representation:* Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.

*Temporal Representation:* Data were collected between 1998 and 2000.

*Environmental Conditions:* Samples were collected in both wet and dry seasons.

*Data Quality Assessment:* Methods used were equivalent to those used in the BPTCP QAPP (Stephenson, et al., 1994). All reported data met QA requirements.

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***Numeric Line of Evidence*** Population/Community Degradation

*Beneficial Use:* ES - Estuarine Habitat, MA - Marine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

*Evaluation Guideline:* Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. the index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community.

*Data Used to Assess Water* Relative benthic index = 0.22, 0.25, 0.43 (3 benthic gradient samples) (Hunt et

*Quality:* al., 1998b).

*Spatial Representation:* Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.

*Temporal Representation:* Data was collected from 9/94 - 9/97.

*Data Quality Assessment:* BPTCP Quality Assurance Project Plan.

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***Line of Evidence*** Remedial Program in Place

*Beneficial Use* ES - Estuarine Habitat

*Information Used to Assess Water Quality:* The BPTCP Consolidated Toxic Hot Spots Cleanup Plan presents a variety of corrective actions that need to be completed in order for the cove to be remediated. Responsible parties have been identified.

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## Region 2

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<b>Water Segment:</b>	Islais Creek
<b>Pollutant:</b>	Dieldrin
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for removal from the section 303(d) list under sections 4.6 and 4.9 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess delisting status while under section 4.9, a minimum of two lines of evidence are needed to assess listing status.</p> <p>Six lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant sediment toxicity and the pollutant concentration exceeds the sediment guideline. The benthic community is impacted.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.</li><li>2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>4. Seven of 49 samples exceeded the 8 ng/g ERM sediment quality guideline, 14 of 27 samples exhibit toxicity, and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy. The benthic community in this water body is impacted and this pollutant is associated with this impact.</li><li>5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Sediment
<b><i>Beneficial Use:</i></b>	ES - Estuarine Habitat
<b><i>Matrix:</i></b>	Sediment
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	<p>All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.</p> <p>There shall be no chronic toxicity in ambient waters. Chronic toxicity is a</p>

	detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	ERM of 8 ng/g used (Long et al., 1995).
<i>Data Used to Assess Water Quality:</i>	One of 3 samples exceeded ERM (Hunt et al., 1998b).
<i>Spatial Representation:</i>	Data was collected at same locations as benthic community and toxicity samples.
<i>Temporal Representation:</i>	Data was collected in 1997.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Sediment
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	ERM of 8 ng/g used (Long et al., 1995).
<i>Data Used to Assess Water Quality:</i>	Six of 46 samples exceeded the ERM ( Battelle Memorial Institute, 2002).
<i>Spatial Representation:</i>	Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.
<i>Temporal Representation:</i>	Samples were collected between 1998 and 2000.
<i>Data Quality Assessment:</i>	Methods used were equivalent to those used in the BPTCP QAPP. All reported data met QA requirements.

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<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat, MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms (SFBRWQCB, 1995).
<i>Evaluation Guideline:</i>	BPTCP Reference envelope approach used (SWRCB, 1997).
<i>Data Used to Assess Water Quality:</i>	Significant amphipod toxicity in 3 of 4 samples (75%), Significant urchin toxicity in 4 of 5 samples (80%) (Hunt et al., 1998b).
<i>Spatial Representation:</i>	Data was synoptically collected with benthic community and toxicity

	measurements over the length of the creek.
<i>Temporal Representation:</i>	Data was collected from 9/94 - 9/97.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan (Stephenson et al., 1994).

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<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat, MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms (SFBRWQCB, 1995).  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	BPTCP Reference envelope approach used.
<i>Data Used to Assess Water Quality:</i>	Significant amphipod toxicity in 7 of 18 samples (Battelle Memorial Institute, 2002).
<i>Spatial Representation:</i>	Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.
<i>Temporal Representation:</i>	Data were collected between 1998 and 2000.
<i>Environmental Conditions:</i>	Samples were collected in both wet and dry seasons.
<i>Data Quality Assessment:</i>	Methods used were equivalent to those used in the BPTCP QAPP (Stephenson, et al., 1994). All reported data met QA requirements.

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<b><i>Numeric Line of Evidence</i></b>	Population/Community Degradation
<i>Beneficial Use:</i>	ES - Estuarine Habitat, MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. the index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community.
<i>Data Used to Assess Water Quality:</i>	Relative benthic index = 0.22, 0.25, 0.43 (3 benthic gradient samples) (Hunt et al., 1998b).

*Spatial Representation:* Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.

*Temporal Representation:* Data was collected from 9/94 - 9/97.

*Data Quality Assessment:* BPTCP Quality Assurance Project Plan.

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***Line of Evidence*** Remedial Program in Place

*Beneficial Use* ES - Estuarine Habitat

*Information Used to Assess Water Quality:* The BPTCP Consolidated Toxic Hot Spots Cleanup Plan presents a variety of corrective actions that need to be completed in order for the cove to be remediated. Responsible parties have been identified.

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## Region 2

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<b>Water Segment:</b>	Islais Creek
<b>Pollutant:</b>	Polychlorinated biphenyls
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for removal from the 303(d) list under sections 4.6, and 4.10 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess delisting status while under section 4.10, a minimum of two lines of evidence are needed to assess delisting status.</p> <p>Six lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6 the site has significant sediment toxicity but there is insufficient information to determine whether the pollutant contributes to the toxic effects. The benthic community may be impacted by this pollutant. A remedial program has scheduled actions to address this pollutant water body combination.</p> <p>Based on the readily available data and information for sediments, the weight of evidence indicates that there sufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category. This pollutant should not be removed from this segment because PCBs have been found to bioaccumulate in fish tissue.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.</li><li>2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>4. Two of 49 samples exceeded the sediment guideline and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy. Ten of 22 samples exhibited significant amphipod toxicity, 4 of five samples exhibited significant sea urchin toxicity and the benthic community is considered to be degraded.</li><li>5. Pursuant to section 3.11 of the Listing Policy, PCBs have been listed throughout the Bay because of concerns with bioaccumulation in fish tissue.</li></ol>
<b>SWRCB Staff Recommendation:</b>	<p>After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because the PCB sediment quality is not exceeded and although there is significant sediment toxicity it cannot be determined if the pollutant contributes to or causes the documented toxicity effects.</p>

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Sediment
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms (SFBRWQCB, 1995).

*Evaluation Guideline:* Sediment guideline of 400 ng/g used (MacDonald et al., 2000).

*Data Used to Assess Water Quality:* One of 3 samples exceeded sediment guideline (Hunt et al., 1998b).

*Spatial Representation:* Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.

*Temporal Representation:* Data was collected from 9/94 - 9/97.

*Data Quality Assessment:* BPTCP Quality Assurance Project Plan (Stephenson et al, 1994).

***Numeric Line of Evidence*** Pollutant-Sediment

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms (SRBRWQCB, 1995).

*Evaluation Guideline:* Sediment guideline of 400 ng/g used (MacDonald et al., 2000).

*Data Used to Assess Water Quality:* One of 46 samples exceeded the sediment quality guideline (Battelle Memorial Institute, 2002).

*Spatial Representation:* Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.

*Temporal Representation:* Data were collected between 1998 and 2000.

*Data Quality Assessment:* Methods used were equivalent to those used in the BPTCP QAPP (Stephenson et al., 1994). All reported data met QA requirements.

***Numeric Line of Evidence*** Toxicity

*Beneficial Use:* ES - Estuarine Habitat, MA - Marine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms (SFBRWQCB, 1995).

*Evaluation Guideline:* BPTCP Reference envelope approach used (SWRCB, 1997).

*Data Used to Assess Water Quality:* Significant amphipod toxicity in 3 of 4 samples (75%), Significant urchin toxicity in 4 of 5 samples (80%) (Hunt et al., 1998b).

*Spatial Representation:* Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.

*Temporal Representation:* Data was collected from 9/94 - 9/97.  
*Data Quality Assessment:* BPTCP Quality Assurance Project Plan (Stephenson et al., 1994).

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***Numeric Line of Evidence*** Toxicity  
*Beneficial Use:* ES - Estuarine Habitat, MA - Marine Habitat  
*Matrix:* Sediment  
*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms (SFBRWQCB, 1995).  
There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.  
*Evaluation Guideline:* BPTCP Reference envelope approach used.  
*Data Used to Assess Water Quality:* Significant amphipod toxicity in 7 of 18 samples (Battelle Memorial Institute, 2002).  
*Spatial Representation:* Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.  
*Temporal Representation:* Data were collected between 1998 and 2000.  
*Environmental Conditions:* Samples were collected in both wet and dry seasons.  
*Data Quality Assessment:* Methods used were equivalent to those used in the BPTCP QAPP (Stephenson, et al., 1994). All reported data met QA requirements.

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***Numeric Line of Evidence*** Population/Community Degradation  
*Beneficial Use:* ES - Estuarine Habitat, MA - Marine Habitat  
*Matrix:* Sediment  
*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  
There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.  
*Evaluation Guideline:* Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. the index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community.  
*Data Used to Assess Water Quality:* Relative benthic index = 0.22, 0.25, 0.43 (3 benthic gradient samples) (Hunt et al., 1998b).  
*Spatial Representation:* Data was synoptically collected with benthic community and toxicity

measurements over the length of the creek.  
*Temporal Representation:* Data was collected from 9/94 - 9/97.  
*Data Quality Assessment:* BPTCP Quality Assurance Project Plan.

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***Line of Evidence*** Remedial Program in Place  
*Beneficial Use* ES - Estuarine Habitat  
*Information Used to Assess Water Quality:* The BPTCP Consolidated Toxic Hot Spots Cleanup Plan presents a variety of corrective actions that need to be completed in order for the cove to be remediated. Responsible parties have been identified.

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## Region 2

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<b>Water Segment:</b>	Islais Creek
<b>Pollutant:</b>	Sulfide-Hydrogen Sulfide
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for removal from the section 303(d) list under sections 4.6 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess delisting status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant sediment toxicity and the pollutant concentration does not exceed the sediment guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.</li><li>2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>4. All samples in the two lines of evidence exhibited significant toxicity and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.</li><li>5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
<b>Lines of Evidence:</b>	

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<b><i>Numeric Line of Evidence</i></b>	Toxicity
<b><i>Beneficial Use:</i></b>	ES - Estuarine Habitat
<b><i>Matrix:</i></b>	Sediment
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms (SFBWQCB, 1995).
<b><i>Evaluation Guideline:</i></b>	Effect thresholds for BPTCP toxicity test protocols Eohaustorius LOEC 0.114 mg/L (Knezovich et al., 1996) Mytilus LOEC 0.0053 mg/L (Hunt et al., 1998).Rhepoxynius LOEC 0.087 mg/L

(Hunt et al., 1998).  
 Purple Urchin Development LOEC 0.0076 mg/L (Knezovich et al., 1996)  
 Purple Urchin Fertilization LOEC 0.007-0.014 NOEC (Bay et al., 1993)

*Data Used to Assess Water Quality:* Six samples exceeding the threshold in six total measurements. Eohaustorius and purple urchin tests (Hunt et al., 1998a).

*Spatial Representation:* Data was concurrently collected from samples tested for toxicity .

*Temporal Representation:* Data was collected in September 1994.

*Data Quality Assessment:* BPTCP Quality Assurance Project Plan (SWRCB, 1994).

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***Numeric Line of Evidence*** Toxicity

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms (SFBRWQCB, 1995).

*Evaluation Guideline:* BPTCP Reference envelope approach was used.

*Data Used to Assess Water Quality:* Six samples, all showed significant toxicity (Hunt et al., 1998b).

*Spatial Representation:* Samples taken from one location.

*Temporal Representation:* Samples collected in September 1994.

*Data Quality Assessment:* BPTCP Quality Assurance Project Plan (Stephenson et al., 1994).

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***Line of Evidence*** Remedial Program in Place

*Beneficial Use* ES - Estuarine Habitat

*Information Used to Assess Water Quality:* The BPTCP Consolidated Toxic Hot Spots Cleanup Plan presents a variety of corrective actions that need to be completed in order for the cove to be remediated. Responsible parties have been identified.

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## Region 2

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**Water Segment:** Mission Creek

**Pollutant:** Chlordane

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under sections 4.6 and 4.9 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess delisting status while under section 4.9, a minimum of two lines of evidence are needed to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant sediment toxicity and the pollutant concentration exceeds the sediment guideline. The benthic community is impacted and the pollutant is associated with the impact.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Twenty-nine of 47 samples exceeded the sediment guideline, 7 of 26 samples exhibit toxicity, and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy. The benthic community in this water body is impacted and this pollutant is associated with this impact.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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*Numeric Line of Evidence* Pollutant-Sediment

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

	There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	ERM of 6 ng/g used (Long and Morgan, 1990).
<i>Data Used to Assess Water Quality:</i>	Two of 3 sample measurements exceed the sediment guideline (Hunt et al., 1998b).
<i>Spatial Representation:</i>	Data were collected concurrently with benthic community and toxicity measurements.
<i>Temporal Representation:</i>	Data was collected, from 5/95-4/97.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

<b><i>Numeric Line of Evidence</i></b>	Pollutant-Sediment
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	ERM of 6 ng/g used (Long and Morgan, 1990).
<i>Data Used to Assess Water Quality:</i>	Twenty-eight of 44 samples exceeded the ERM (Battelle Memorial Institute, 2002).
<i>Spatial Representation:</i>	Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.
<i>Temporal Representation:</i>	Data were collected between 1998 and 2000.
<i>Data Quality Assessment:</i>	Methods used were equivalent to those used in the BPTCP QAPP. All reported data met QA requirements.

<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	BPTCP reference envelope approach used.



<i>Data Used to Assess Water Quality:</i>	BPTCP Data: Significant amphipod toxicity, 3 of 5 tests (60%) significant urchin toxicity (Hunt et al., 1998b). SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Six transects were monitored over three years and at corresponding North and South sampling stations for each transect (i.e. 1N, 1S). Excluding stations 5 and 6 (No data for 1999 and 2000), the data shows 4 of 20 sampling stations (1N/S-4N/S) indicate sediment toxicity and amphipod survival below the BPTCP reference tolerance limit (Battelle Memorial Institute, 2002).
<i>Spatial Representation:</i>	Data were collected concurrently with benthic and chemical measurements.
<i>Temporal Representation:</i>	Data was collected from 5/95-4/97.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan. SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Appropriate QA procedures were followed.

<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community (BPTCP, 1998).
<i>Evaluation Guideline:</i>	BPTCP reference envelope approach used.
<i>Data Used to Assess Water Quality:</i>	Significant amphipod toxicity was observed in 4 of 21 samples. Observed toxicity was recorded in the year 2000 only (Battelle Memorial Institute, 2002).
<i>Spatial Representation:</i>	Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.
<i>Temporal Representation:</i>	Data were collected between 1998 and 2000.

<b><i>Numeric Line of Evidence</i></b>	Population/Community Degradation
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a

calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. the index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community (BPTCP, 1998).

<i>Data Used to Assess Water Quality:</i>	Relative benthic index = 0.00, 0.34, and 0.65 (3 benthic gradient samples) (Hunt et al, 1998b).
<i>Spatial Representation:</i>	Data were collected concurrently with toxicity and chemical samples.
<i>Temporal Representation:</i>	Data was collected, from 5/95-4/97.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

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<b><i>Line of Evidence</i></b>	Remedial Program in Place
<i>Beneficial Use</i>	ES - Estuarine Habitat
<i>Information Used to Assess Water Quality:</i>	The BPTCP Consolidated Toxic Hot Spots Cleanup Plan presents a variety of corrective actions that need to be completed in order for the cove to be remediated. Responsible parties have been identified.

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## Region 2

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**Water Segment:** Mission Creek

**Pollutant:** Dieldrin

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under sections 4.6 and 4.9 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess delisting status while under section 4.9, a minimum of two lines of evidence are needed to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant sediment toxicity and the pollutant concentration exceeds the sediment guideline. The benthic community is impacted and the pollutant is associated with the impact.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Seventeen of 49 samples exceeded the 8 ng/g ERM sediment quality guideline, 7 of 26 samples exhibit toxicity, and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy. The benthic community in this water body is impacted and this pollutant is associated with this impact.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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*Numeric Line of Evidence*

Pollutant-Sediment

*Beneficial Use:*

ES - Estuarine Habitat

*Matrix:*

Sediment

*Water Quality Objective/  
Water Quality Criterion:*

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

	There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	ERM of 8 ng/g used (Long et al., 1995).
<i>Data Used to Assess Water Quality:</i>	One of 5 samples exceeded the guideline (Hunt et al., 1998b).
<i>Spatial Representation:</i>	Data were collected concurrently with benthic community and toxicity measurements.
<i>Temporal Representation:</i>	Data was collected, from 5/95-4/97.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

<b><i>Numeric Line of Evidence</i></b>	Pollutant-Sediment
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	ERM of 8 ng/g used (Long et al., 1995).
<i>Data Used to Assess Water Quality:</i>	Sixteen of 44 samples exceeded the ERM (Battelle Memorial Institute, 2002).
<i>Spatial Representation:</i>	Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.
<i>Temporal Representation:</i>	Data were collected between 1998 and 2000.
<i>Data Quality Assessment:</i>	Methods used were equivalent to those used in the BPTCP QAPP. All reported data met QA requirements.

<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	BPTCP reference envelope approach used.

<i>Data Used to Assess Water Quality:</i>	BPTCP Data: Significant amphipod toxicity, 3 of 5 tests (60%) significant urchin toxicity (Hunt et al., 1998b). SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Six transects were monitored over three years and at corresponding North and South sampling stations for each transect (i.e. 1N, 1S). Excluding stations 5 and 6 (No data for 1999 and 2000), the data shows 4 of 20 sampling stations (1N/S-4N/S) indicate sediment toxicity and amphipod survival below the BPTCP reference tolerance limit (Battelle Memorial Institute, 2002).
<i>Spatial Representation:</i>	Data were collected concurrently with benthic and chemical measurements.
<i>Temporal Representation:</i>	Data was collected from 5/95-4/97.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan. SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Appropriate QA procedures were followed.

<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community (BPTCP, 1998).
<i>Evaluation Guideline:</i>	BPTCP reference envelope approach used.
<i>Data Used to Assess Water Quality:</i>	Significant amphipod toxicity was observed in 4 of 21 samples. Observed toxicity was recorded in the year 2000 only (Battelle Memorial Institute, 2002).
<i>Spatial Representation:</i>	Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.
<i>Temporal Representation:</i>	Data were collected between 1998 and 2000.

<b><i>Numeric Line of Evidence</i></b>	Population/Community Degradation
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a

calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. the index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community (BPTCP, 1998).

*Data Used to Assess Water Quality:* Relative benthic index = 0.00, 0.34, and 0.65 (3 benthic gradient samples) (Hunt et al, 1998b).

*Spatial Representation:* Data were collected concurrently with toxicity and chemical samples.

*Temporal Representation:* Data was collected, from 5/95-4/97.

*Data Quality Assessment:* BPTCP Quality Assurance Project Plan.

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***Line of Evidence*** Remedial Program in Place

*Beneficial Use* ES - Estuarine Habitat

*Information Used to Assess Water Quality:* The BPTCP Consolidated Toxic Hot Spots Cleanup Plan presents a variety of corrective actions that need to be completed in order for the cove to be remediated. Responsible parties have been identified.

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## Region 2

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**Water Segment:** Mission Creek

**Pollutant:** Lead

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under sections 4.6 and 4.9 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess delisting status while under section 4.9, a minimum of two lines of evidence are needed to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant sediment toxicity and the pollutant concentration exceeds the sediment guideline. The benthic community is impacted and the pollutant is associated with the impact.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Twenty-seven of 47 samples exceeded the 112.18 ug/g PEL sediment quality guideline, 7 of 26 samples exhibit toxicity, and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy. The benthic community in this water body is impacted and this pollutant is associated with this impact.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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*Numeric Line of Evidence* Pollutant-Sediment

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

	There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	Probable Effects Level of 112.18 ug/g was used (MacDonald et al., 1996).
<i>Data Used to Assess Water Quality:</i>	Two of 3 samples exceeded the sediment guideline (Hunt et al., 1998b).
<i>Spatial Representation:</i>	Data were collected concurrently with benthic community and toxicity measurements.
<i>Temporal Representation:</i>	Data was collected in 1997.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

<b><i>Numeric Line of Evidence</i></b>	Pollutant-Sediment
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	Probable Effects Level of 112.18 ug/g was used (MacDonald et al., 1996).
<i>Data Used to Assess Water Quality:</i>	Twenty-five of 44 samples exceeded the Probable Effects Level (Battelle Memorial Institute, 2002).
<i>Spatial Representation:</i>	Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.
<i>Temporal Representation:</i>	Data were collected between 1998 and 2000.
<i>Data Quality Assessment:</i>	Methods used were equivalent to those used in the BPTCP QAPP. All reported data met QA requirements.

<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.



<i>Evaluation Guideline:</i>	BPTCP reference envelope approach used.
<i>Data Used to Assess Water Quality:</i>	BPTCP Data: Significant amphipod toxicity, 3 of 5 tests (60%) significant urchin toxicity (Hunt et al., 1998b). SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Six transects were monitored over three years and at corresponding North and South sampling stations for each transect (i.e. 1N, 1S). Excluding stations 5 and 6 (No data for 1999 and 2000), the data shows 4 of 20 sampling stations (1N/S-4N/S) indicate sediment toxicity and amphipod survival below the BPTCP reference tolerance limit (Battelle Memorial Institute, 2002).
<i>Spatial Representation:</i>	Data were collected concurrently with benthic and chemical measurements.
<i>Temporal Representation:</i>	Data was collected from 5/95-4/97.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan. SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Appropriate QA procedures were followed.

<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community (BPTCP, 1998).
<i>Evaluation Guideline:</i>	BPTCP reference envelope approach used.
<i>Data Used to Assess Water Quality:</i>	Significant amphipod toxicity was observed in 4 of 21 samples. Observed toxicity was recorded in the year 2000 only (Battelle Memorial Institute, 2002).
<i>Spatial Representation:</i>	Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.
<i>Temporal Representation:</i>	Data were collected between 1998 and 2000.

<b><i>Numeric Line of Evidence</i></b>	Population/Community Degradation
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

<i>Evaluation Guideline:</i>	Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. the index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community (BPTCP, 1998).
<i>Data Used to Assess Water Quality:</i>	Relative benthic index = 0.00, 0.34, and 0.65 (3 benthic gradient samples) (Hunt et al, 1998b).
<i>Spatial Representation:</i>	Data were collected concurrently with toxicity and chemical samples.
<i>Temporal Representation:</i>	Data was collected, from 5/95-4/97.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

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<b><i>Line of Evidence</i></b>	Remedial Program in Place
<i>Beneficial Use</i>	ES - Estuarine Habitat
<i>Information Used to Assess Water Quality:</i>	The BPTCP Consolidated Toxic Hot Spots Cleanup Plan presents a variety of corrective actions that need to be completed in order for the cove to be remediated. Responsible parties have been identified.

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## Region 2

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**Water Segment:** Mission Creek

**Pollutant:** Mercury

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under sections 4.6 and 4.9 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess delisting status while under section 4.9, a minimum of two lines of evidence are needed to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant sediment toxicity and the pollutant concentration exceeds the sediment guideline. The benthic community is impacted and the pollutant is associated with the impact.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Five of 47 samples exceeded the 2.1 ug/g sediment quality guideline, 7 of 26 samples exhibit toxicity, and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy. The benthic community in this water body is impacted and this pollutant is associated with this impact.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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*Numeric Line of Evidence* Pollutant-Sediment

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

*Evaluation Guideline:* Sediment guideline of 2.1 ug/g was used (PTI Environmental Services, 1991).

*Data Used to Assess Water Quality:* One of 3 samples exceeded guideline (Hunt et al., 1998b).

*Spatial Representation:* Data were collected concurrently with benthic community and toxicity samples.

*Temporal Representation:* Data was collected, from 5/95-4/97.

***Numeric Line of Evidence*** Pollutant-Sediment

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

*Evaluation Guideline:* Sediment guideline of 2.1 ug/g was used (PTI Environmental Services, 1991).

*Data Used to Assess Water Quality:* Four of 44 samples exceeded the sediment quality guideline (Battelle Memorial Institute, 2002).

*Spatial Representation:* Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.

*Temporal Representation:* Data were collected between 1998 and 2000.

*Data Quality Assessment:* Methods used were equivalent to those used in the BPTCP QAPP. All reported data met QA requirements.

***Numeric Line of Evidence*** Toxicity

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

*Evaluation Guideline:* BPTCP reference envelope approach used.

*Data Used to Assess Water Quality:* BPTCP Data: Significant amphipod toxicity, 3 of 5 tests (60%) significant urchin toxicity (Hunt et al., 1998b). SWRCB received "Sediment Investigations

at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Six transects were monitored over three years and at corresponding North and South sampling stations for each transect (i.e. 1N, 1S). Excluding stations 5 and 6 (No data for 1999 and 2000), the data shows 4 of 20 sampling stations (1N/S-4N/S) indicate sediment toxicity and amphipod survival below the BPTCP reference tolerance limit (Battelle Memorial Institute, 2002).

*Spatial Representation:* Data were collected concurrently with benthic and chemical measurements.

*Temporal Representation:* Data was collected from 5/95-4/97.

*Data Quality Assessment:* BPTCP Quality Assurance Project Plan. SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Appropriate QA procedures were followed.

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***Numeric Line of Evidence*** Toxicity

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community (BPTCP, 1998).

*Evaluation Guideline:* BPTCP reference envelope approach used.

*Data Used to Assess Water Quality:* Significant amphipod toxicity was observed in 4 of 21 samples. Observed toxicity was recorded in the year 2000 only (Battelle Memorial Institute, 2002).

*Spatial Representation:* Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.

*Temporal Representation:* Data were collected between 1998 and 2000.

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***Numeric Line of Evidence*** Population/Community Degradation

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

*Evaluation Guideline:* Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. the index ranges from 0 to 1.0. An index

value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community (BPTCP, 1998).

<i>Data Used to Assess Water Quality:</i>	Relative benthic index = 0.00, 0.34, and 0.65 (3 benthic gradient samples) (Hunt et al, 1998b).
<i>Spatial Representation:</i>	Data were collected concurrently with toxicity and chemical samples.
<i>Temporal Representation:</i>	Data was collected, from 5/95-4/97.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

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<b><i>Line of Evidence</i></b>	Remedial Program in Place
<i>Beneficial Use</i>	ES - Estuarine Habitat
<i>Information Used to Assess Water Quality:</i>	The BPTCP Consolidated Toxic Hot Spots Cleanup Plan presents a variety of corrective actions that need to be completed in order for the cove to be remediated. Responsible parties have been identified.

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## Region 2

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**Water Segment:** Mission Creek

**Pollutant:** Polychlorinated biphenyls

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under sections 4.6 and 4.9 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess delisting status while under section 4.9, a minimum of two lines of evidence are needed to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant sediment toxicity and the pollutant concentration exceeds the sediment guideline. The benthic community is impacted and the pollutant is associated with the impact.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Ten of 47 samples exceeded the 400 ng/g sediment guideline, 7 of 26 samples exhibit toxicity, and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy. The benthic community in this water body is impacted and this pollutant is associated with this impact.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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*Numeric Line of Evidence*

Pollutant-Sediment

*Beneficial Use:*

ES - Estuarine Habitat

*Matrix:*

Sediment

*Water Quality Objective/  
Water Quality Criterion:*

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

*Evaluation Guideline:*

Sediment guideline of 400 ng/g used (MacDonald et al., 2000).

*Data Used to Assess Water Quality:*

BPTCP Data: Two of 3 samples exceeded the sediment quality guideline.

SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Six transects were monitored over three years and at corresponding North and South sampling stations for each transect (i.e. 1N, 1S). Levels of PCBs at the highest detected levels at transect sampling stations 1N/S-4N/S with some pollutants in exceedance of the ERM's in 1998 only (Battelle Memorial Institute, 2002).

*Spatial Representation:*

BPTCP data collected concurrently with benthic and toxicity data.

*Temporal Representation:*

Data was collected, from 5/95-4/97.

*Data Quality Assessment:*

BPTCP Quality Assurance Project Plan.

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***Numeric Line of Evidence***

Pollutant-Sediment

*Beneficial Use:*

ES - Estuarine Habitat

*Matrix:*

Sediment

*Water Quality Objective/  
Water Quality Criterion:*

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

*Evaluation Guideline:*

Sediment guideline of 400 ng/g used (MacDonald et al., 2000).

*Data Used to Assess Water Quality:*

Eight of 44 samples exceeded the sediment quality guideline (Battelle Memorial institute, 2002).

*Spatial Representation:*

Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.

*Temporal Representation:*

Data were collected between 1998 and 2000.

*Data Quality Assessment:*

Methods used were equivalent to those used in the BPTCP QAPP. All reported data met QA requirements.

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***Numeric Line of Evidence***

Toxicity

*Beneficial Use:*

ES - Estuarine Habitat

*Matrix:*

Sediment

*Water Quality Objective/  
Water Quality Criterion:*

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a



detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

<i>Evaluation Guideline:</i>	BPTCP reference envelope approach used.
<i>Data Used to Assess Water Quality:</i>	BPTCP Data: Significant amphipod toxicity, 3 of 5 tests (60%) significant urchin toxicity (Hunt et al., 1998b). SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Six transects were monitored over three years and at corresponding North and South sampling stations for each transect (i.e. 1N, 1S). Excluding stations 5 and 6 (No data for 1999 and 2000), the data shows 4 of 20 sampling stations (1N/S-4N/S) indicate sediment toxicity and amphipod survival below the BPTCP reference tolerance limit (Battelle Memorial Institute, 2002).
<i>Spatial Representation:</i>	Data were collected concurrently with benthic and chemical measurements.
<i>Temporal Representation:</i>	Data was collected from 5/95-4/97.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan. SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Appropriate QA procedures were followed.

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<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community (BPTCP, 1998).
<i>Evaluation Guideline:</i>	BPTCP reference envelope approach used.
<i>Data Used to Assess Water Quality:</i>	Significant amphipod toxicity was observed in 4 of 21 samples. Observed toxicity was recorded in the year 2000 only (Battelle Memorial Institute, 2002).
<i>Spatial Representation:</i>	Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.
<i>Temporal Representation:</i>	Data were collected between 1998 and 2000.

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<b><i>Numeric Line of Evidence</i></b>	Population/Community Degradation
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a

detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

*Evaluation Guideline:*

Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. the index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community (BPTCP, 1998).

*Data Used to Assess Water Quality:*

Relative benthic index = 0.00, 0.34, and 0.65 (3 benthic gradient samples) (Hunt et al, 1998b).

*Spatial Representation:*

Data were collected concurrently with toxicity and chemical samples.

*Temporal Representation:*

Data was collected, from 5/95-4/97.

*Data Quality Assessment:*

BPTCP Quality Assurance Project Plan.

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***Line of Evidence***

Remedial Program in Place

***Beneficial Use***

ES - Estuarine Habitat

***Information Used to Assess Water Quality:***

The BPTCP Consolidated Toxic Hot Spots Cleanup Plan presents a variety of corrective actions that need to be completed in order for the cove to be remediated. Responsible parties have been identified.

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## Region 2

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<b>Water Segment:</b>	Mission Creek
<b>Pollutant:</b>	Polycyclic Aromatic Hydrocarbons (PAHs) (Aquatic Ecosystems)
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for removal from the section 303(d) list under sections 4.6 and 4.9 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess delisting status while under section 4.9, a minimum of two lines of evidence are needed to assess listing status.</p> <p>Six lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant sediment toxicity and the pollutant concentration exceeds the sediment guideline. The benthic community is impacted and the pollutant is associated with the impact.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.</li><li>2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>4. Thirteen of 47 samples exceeded the 9,600 ng/g ERM sediment quality guideline, 7 of 26 samples exhibit toxicity, and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy. The benthic community in this water body is impacted and this pollutant is associated with this impact.</li><li>5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
<b>Lines of Evidence:</b>	

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<i>Numeric Line of Evidence</i>	Pollutant-Sediment
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

	There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	ERM of 9,600 ng/g used (Long et al., 1995).
<i>Data Used to Assess Water Quality:</i>	Two of 3 samples exceeded sediment guideline (Hunt et al., 1998b).
<i>Spatial Representation:</i>	Data were collected concurrently with benthic and toxicity measurements.
<i>Temporal Representation:</i>	Data was collected, from 5/95-4/97.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

<b><i>Numeric Line of Evidence</i></b>	Pollutant-Sediment
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	ERM of 9,600 ng/g used (Long et al., 1995).
<i>Data Used to Assess Water Quality:</i>	Eleven of 44 samples exceeded the ERM (Battelle Memorial institute, 2002).
<i>Spatial Representation:</i>	Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.
<i>Temporal Representation:</i>	Data were collected between 1998 and 2000.
<i>Data Quality Assessment:</i>	Methods used were equivalent to those used in the BPTCP QAPP. All reported data met QA requirements.

<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	BPTCP reference envelope approach used.
<i>Data Used to Assess Water</i>	BPTCP Data: Significant amphipod toxicity, 3 of 5 tests (60%) significant

*Quality:* urchin toxicity (Hunt et al., 1998b). SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Six transects were monitored over three years and at corresponding North and South sampling stations for each transect (i.e. 1N, 1S). Excluding stations 5 and 6 (No data for 1999 and 2000), the data shows 4 of 20 sampling stations (1N/S-4N/S) indicate sediment toxicity and amphipod survival below the BPTCP reference tolerance limit (Battelle Memorial Institute, 2002).

*Spatial Representation:* Data were collected concurrently with benthic and chemical measurements.

*Temporal Representation:* Data was collected from 5/95-4/97.

*Data Quality Assessment:* BPTCP Quality Assurance Project Plan. SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Appropriate QA procedures were followed.

***Numeric Line of Evidence*** Toxicity

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community (BPTCP, 1998).

*Evaluation Guideline:* BPTCP reference envelope approach used.

*Data Used to Assess Water Quality:* Significant amphipod toxicity was observed in 4 of 21 samples. Observed toxicity was recorded in the year 2000 only (Battelle Memorial Institute, 2002).

*Spatial Representation:* Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.

*Temporal Representation:* Data were collected between 1998 and 2000.

***Numeric Line of Evidence*** Population/Community Degradation

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

*Evaluation Guideline:* Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean

species and indicator species at a site. the index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community (BPTCP, 1998).

<i>Data Used to Assess Water Quality:</i>	Relative benthic index = 0.00, 0.34, and 0.65 (3 benthic gradient samples) (Hunt et al, 1998b).
<i>Spatial Representation:</i>	Data were collected concurrently with toxicity and chemical samples.
<i>Temporal Representation:</i>	Data was collected, from 5/95-4/97.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

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<b><i>Line of Evidence</i></b>	Remedial Program in Place
<b><i>Beneficial Use</i></b>	ES - Estuarine Habitat
<b><i>Information Used to Assess Water Quality:</i></b>	The BPTCP Consolidated Toxic Hot Spots Cleanup Plan presents a variety of corrective actions that need to be completed in order for the cove to be remediated. Responsible parties have been identified.

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## Region 2

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**Water Segment:** Mission Creek

**Pollutant:** Silver

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under sections 4.6 and 4.9 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess delisting status while under section 4.9, a minimum of two lines of evidence are needed to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant sediment toxicity and the pollutant concentration not exceeds the sediment guideline. The benthic community is impacted.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Sixteen of 49 samples exceeded the 1.77 ug/g PEL sediment quality guideline, 7 of 26 samples exhibit toxicity, and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy. The benthic community in this water body is impacted and this pollutant is associated with this impact.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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*Numeric Line of Evidence* Pollutant-Sediment

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

<i>Evaluation Guideline:</i>	There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Data Used to Assess Water Quality:</i>	PEL of 1.77 ug/g used (MacDonald et al., 1996).
<i>Spatial Representation:</i>	One of 3 samples exceed sediment guideline (Hunt et al., 1998b).
<i>Temporal Representation:</i>	Data were collected concurrently with benthic community and toxicity measurements.
<i>Data Quality Assessment:</i>	Data was collected in 1997.
	BPTCP Quality Assurance Project Plan.

<b><i>Numeric Line of Evidence</i></b>	Pollutant-Sediment
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.
	There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

Data were collected between 1998 and 2000.

<i>Evaluation Guideline:</i>	PEL of 1.77 ug/g used (MacDonald et al., 1996).
<i>Data Used to Assess Water Quality:</i>	Fifteen of 44 samples exceeded the PEL (Battelle Memorial Institute, 2002).
<i>Spatial Representation:</i>	Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.
<i>Temporal Representation:</i>	Data were collected between 1998 and 2000.
<i>Data Quality Assessment:</i>	Methods used were equivalent to those used in the BPTCP QAPP. All reported data met QA requirements.

<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.
	There shall be no chronic toxicity in ambient waters. Chronic toxicity is a



detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

*Evaluation Guideline:*

BPTCP reference envelope approach used.

*Data Used to Assess Water Quality:*

BPTCP Data: Significant amphipod toxicity, 3 of 5 tests (60%) significant urchin toxicity (Hunt et al., 1998b). SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Six transects were monitored over three years and at corresponding North and South sampling stations for each transect (i.e. 1N, 1S). Excluding stations 5 and 6 (No data for 1999 and 2000), the data shows 4 of 20 sampling stations (1N/S-4N/S) indicate sediment toxicity and amphipod survival below the BPTCP reference tolerance limit (Battelle Memorial Institute, 2002).

*Spatial Representation:*

Data were collected concurrently with benthic and chemical measurements.

*Temporal Representation:*

Data was collected from 5/95-4/97.

*Data Quality Assessment:*

BPTCP Quality Assurance Project Plan. SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Appropriate QA procedures were followed.

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***Numeric Line of Evidence***

Toxicity

*Beneficial Use:*

ES - Estuarine Habitat

*Matrix:*

Sediment

*Water Quality Objective/  
Water Quality Criterion:*

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community (BPTCP, 1998).

*Evaluation Guideline:*

BPTCP reference envelope approach used.

*Data Used to Assess Water Quality:*

Significant amphipod toxicity was observed in 4 of 21 samples. Observed toxicity was recorded in the year 2000 only (Battelle Memorial Institute, 2002).

*Spatial Representation:*

Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.

*Temporal Representation:*

Data were collected between 1998 and 2000.

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***Numeric Line of Evidence***

Population/Community Degradation

*Beneficial Use:*

ES - Estuarine Habitat

*Matrix:*

Sediment

*Water Quality Objective/  
Water Quality Criterion:*

All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a

detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

*Evaluation Guideline:*

Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. the index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community (BPTCP, 1998).

*Data Used to Assess Water Quality:*

Relative benthic index = 0.00, 0.34, and 0.65 (3 benthic gradient samples) (Hunt et al, 1998b).

*Spatial Representation:*

Data were collected concurrently with toxicity and chemical samples.

*Temporal Representation:*

Data was collected, from 5/95-4/97.

*Data Quality Assessment:*

BPTCP Quality Assurance Project Plan.

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***Line of Evidence***

Remedial Program in Place

***Beneficial Use***

ES - Estuarine Habitat

***Information Used to Assess Water Quality:***

The BPTCP Consolidated Toxic Hot Spots Cleanup Plan presents a variety of corrective actions that need to be completed in order for the cove to be remediated. Responsible parties have been identified.

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## Region 2

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**Water Segment:** Mission Creek

**Pollutant:** Zinc

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under sections 4.6 and 4.9 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess delisting status while under section 4.9, a minimum of two lines of evidence are needed to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant sediment toxicity and the pollutant concentration exceeds the sediment guideline. The benthic community is impacted and the pollutant is associated with the impact.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Nine of 47 samples exceeded the sediment guideline, 7 of 26 samples exhibit toxicity, and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy. The benthic community in this water body is impacted and this pollutant is associated with this impact.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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*Numeric Line of Evidence* Pollutant-Sediment

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

	There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	ERM of 410 ug/g used (Long et al., 1995).
<i>Data Used to Assess Water Quality:</i>	One of 3 samples exceeded the ERM. Hunt et al., 1998-b).
<i>Spatial Representation:</i>	Data were collected concurrently with benthic community and toxicity measurements.
<i>Temporal Representation:</i>	Data was collected in 1997.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

<b><i>Numeric Line of Evidence</i></b>	Pollutant-Sediment
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	ERM of 410 ug/g used (Long et al., 1995).
<i>Data Used to Assess Water Quality:</i>	Eight of 44 samples exceeded the ERM (Battelle Memorial Institute, 2002).
<i>Spatial Representation:</i>	Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.
<i>Temporal Representation:</i>	Data were collected between 1998 and 2000.
<i>Data Quality Assessment:</i>	Methods used were equivalent to those used in the BPTCP QAPP. All reported data met QA requirements.

<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	BPTCP reference envelope approach used.

<i>Data Used to Assess Water Quality:</i>	BPTCP Data: Significant amphipod toxicity, 3 of 5 tests (60%) significant urchin toxicity (Hunt et al., 1998b). SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Six transects were monitored over three years and at corresponding North and South sampling stations for each transect (i.e. 1N, 1S). Excluding stations 5 and 6 (No data for 1999 and 2000), the data shows 4 of 20 sampling stations (1N/S-4N/S) indicate sediment toxicity and amphipod survival below the BPTCP reference tolerance limit (Battelle Memorial Institute, 2002).
<i>Spatial Representation:</i>	Data were collected concurrently with benthic and chemical measurements.
<i>Temporal Representation:</i>	Data was collected from 5/95-4/97.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan. SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Appropriate QA procedures were followed.

<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community (BPTCP, 1998).
<i>Evaluation Guideline:</i>	BPTCP reference envelope approach used.
<i>Data Used to Assess Water Quality:</i>	Significant amphipod toxicity was observed in 4 of 21 samples. Observed toxicity was recorded in the year 2000 only (Battelle Memorial Institute, 2002).
<i>Spatial Representation:</i>	Data was synoptically collected with benthic community and toxicity measurements over the length of the creek.
<i>Temporal Representation:</i>	Data were collected between 1998 and 2000.

<b><i>Numeric Line of Evidence</i></b>	Population/Community Degradation
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a

calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. the index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community (BPTCP, 1998).

*Data Used to Assess Water Quality:* Relative benthic index = 0.00, 0.34, and 0.65 (3 benthic gradient samples) (Hunt et al, 1998b).

*Spatial Representation:* Data were collected concurrently with toxicity and chemical samples.

*Temporal Representation:* Data was collected, from 5/95-4/97.

*Data Quality Assessment:* BPTCP Quality Assurance Project Plan.

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***Line of Evidence*** Remedial Program in Place

*Beneficial Use* ES - Estuarine Habitat

*Information Used to Assess Water Quality:* The BPTCP Consolidated Toxic Hot Spots Cleanup Plan presents a variety of corrective actions that need to be completed in order for the cove to be remediated. Responsible parties have been identified.

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## Region 2

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<b>Water Segment:</b>	Oakland Inner Harbor (Fruitvale Site, part of SF Bay, Central)
<b>Pollutant:</b>	Chlordane
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for delisting under sections 4.6 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, it cannot be determined if the site has significant sediment toxicity or whether the pollutant is likely to cause or contribute to any toxic effect.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.</li><li>2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>4. None of 2 samples exceeded the sediment guideline, 2 of 2 samples exhibit toxicity, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.</li><li>5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.
<b>Lines of Evidence:</b>	

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<i>Numeric Line of Evidence</i>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	<p>All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.</p> <p>There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.</p>

<i>Evaluation Guideline:</i>	Reference envelope approach used.
<i>Data Used to Assess Water Quality:</i>	Significant amphipod toxicity in 2 of 2 samples. No significant toxicity in two urchin toxicity tests (Hunt et al., 1998b).
<i>Spatial Representation:</i>	Data were synoptically collected with chemical measurements in sediments.
<i>Temporal Representation:</i>	Data collected between April 1995 and April 1997.
<i>Data Quality Assessment:</i>	Methods used were equivalent to those used in the BPTCP QAPP. All reported data met QA requirements.

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Sediment
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	An Effects Range Median guideline of 6 ng/g dw was used to evaluate Total Chlordane data. This guideline is higher than the guideline used in previous analyses.
<i>Data Used to Assess Water Quality:</i>	None of the 2 samples exceed the sediment quality guideline (Hunt et al., 1998b).
<i>Spatial Representation:</i>	One station. Data was synoptically collected with toxicity measurements.
<i>Temporal Representation:</i>	Data collected in April 1995 and April 1997.
<i>Data Quality Assessment:</i>	Methods used were equivalent to those used in the BPTCP QAPP. All reported data met QA requirements.

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## Region 2

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<b>Water Segment:</b>	Oakland Inner Harbor (Fruitvale Site, part of SF Bay, Central)
<b>Pollutant:</b>	Polychlorinated biphenyls
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for delisting under sections 4.6 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, it cannot be determined if the site has significant sediment toxicity or whether the pollutant is likely to cause or contribute to any toxic effect.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.</li><li>2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>4. None of 2 samples exceeded the sediment guideline, 2 of 2 samples exhibit toxicity, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.</li><li>5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.
<b>Lines of Evidence:</b>	

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<i>Numeric Line of Evidence</i>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	<p>All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.</p> <p>There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.</p>

<i>Evaluation Guideline:</i>	Reference envelope approach used.
<i>Data Used to Assess Water Quality:</i>	Significant amphipod toxicity in 2 of 2 samples. No significant toxicity in two urchin toxicity tests (Hunt et al., 1998b).
<i>Spatial Representation:</i>	Data were synoptically collected with chemical measurements in sediments.
<i>Temporal Representation:</i>	Data collected between April 1995 and April 1997.
<i>Data Quality Assessment:</i>	Methods used were equivalent to those used in the BPTCP QAPP. All reported data met QA requirements.

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Sediment
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	A sediment quality guideline of 400 ng/g was used (McDonald et al., 2000). This guideline is higher than the guideline used in previous analyses (Hunt et al., 1998b).
<i>Data Used to Assess Water Quality:</i>	None of 2 samples exceeded the sediment quality guideline (Hunt et al., 1998b).
<i>Spatial Representation:</i>	Data was synoptically collected with toxicity measurements.
<i>Temporal Representation:</i>	Data collected April 1994 and April 1997.
<i>Data Quality Assessment:</i>	Methods used were equivalent to those used in the BPTCP QAPP. All reported data met QA requirements.

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## Region 2

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**Water Segment:** Oakland Inner Harbor (Pacific Dry-dock Yard 1 Site, part of SF Bay, Central)

**Pollutant:** Chlordane

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.6 of the Listing Policy. Under section 4.6 two lines of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One sample exceeds the sediment guideline but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy. The sediments at this site are toxic.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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 sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. One sample exceeded the guideline. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy. The sediments are toxic in 2 of 4 tests.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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*Numeric Line of Evidence* Pollutant-Sediment

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms (BPTCP, 1998).

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any

	other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	ERM of 6 ng/g used (Long and Morgan, 1990).
<i>Data Used to Assess Water Quality:</i>	One of 2 samples exceed the sediment quality guideline (Hunt et al, 1998b).
<i>Spatial Representation:</i>	Spatial distribution of samples is described in the report: Sediment quality and biological effects in San Francisco Bay (Bay Protection and Toxic Cleanup Program), dated August 1998.
<i>Temporal Representation:</i>	Data collected in 1995.
<i>Data Quality Assessment:</i>	Used BPTCP QA/QC.

<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	BPTCP reference envelope approach used.
<i>Data Used to Assess Water Quality:</i>	Significant amphipod toxicity in 2 of 4 tests. No significant urchin toxicity (4 tests) (Hunt et al., 1998b).
<i>Spatial Representation:</i>	Spatial distribution of samples is described in the report
<i>Temporal Representation:</i>	Data collected during 4/95- 4/97.
<i>Data Quality Assessment:</i>	Used BPTCP QA/QC.

## Region 2

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**Water Segment:** Oakland Inner Harbor (Pacific Dry-dock Yard 1 Site, part of SF Bay, Central)

**Pollutant:** Copper

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under sections 4.6 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess delisting status.

Two lines of evidence are available in the administrative record to assess this pollutant. The site has significant sediment toxicity and the pollutant concentration does not exceed the sediment guideline but there are only a few chemical measurements. The number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. None of 2 samples exceeded the sediment guideline, 2 of 4 samples exhibit toxicity. The number of samples is insufficient to determine if standards are attained.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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*Numeric Line of Evidence* Pollutant-Sediment

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any

	other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	ERM of 270 ug/g was used (Long et al., 1995).
<i>Data Used to Assess Water Quality:</i>	Two samples, no samples exceeding (Hunt et al., 1998b).
<i>Spatial Representation:</i>	Spatial distribution of samples is described in the report
<i>Temporal Representation:</i>	Data collected during 4/95- 4/97.
<i>Data Quality Assessment:</i>	Used BPTCP QA/QC.

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<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	BPTCP reference envelope approach used.
<i>Data Used to Assess Water Quality:</i>	Significant amphipod toxicity in 2 of 4 tests. No significant urchin toxicity (4 tests) (Hunt et al., 1998b).
<i>Spatial Representation:</i>	Spatial distribution of samples is described in the report
<i>Temporal Representation:</i>	Data collected during 4/95- 4/97.
<i>Data Quality Assessment:</i>	Used BPTCP QA/QC.

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## Region 2

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**Water Segment:** Oakland Inner Harbor (Pacific Dry-dock Yard 1 Site, part of SF Bay, Central)

**Pollutant:** Dieldrin

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.6 of the Listing Policy. Under section 4.6 two lines of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One sample exceeds the sediment guideline but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy. The sediments at this site are toxic.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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 sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. One sample exceeded the guideline. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy. The sediments are toxic in 2 of 4 tests.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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**Numeric Line of Evidence** Pollutant-Sediment

**Beneficial Use:** ES - Estuarine Habitat

**Matrix:** Sediment

**Water Quality Objective/  
Water Quality Criterion:** All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

*Evaluation Guideline:* ERM of 8 ng/g used (Long et al., 1995).  
*Data Used to Assess Water Quality:* One of 2 samples exceed the sediment quality guideline (Hunt et al., 1998b).  
*Spatial Representation:* Spatial distribution of samples is described in the report  
*Temporal Representation:* Data collected during 4/95- 4/97.  
*Data Quality Assessment:* Used BPTCP QA/QC.

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***Numeric Line of Evidence*** Toxicity  
*Beneficial Use:* ES - Estuarine Habitat  
*Matrix:* Sediment  
*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  
  
There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.  
  
*Evaluation Guideline:* BPTCP reference envelope approach used.  
*Data Used to Assess Water Quality:* Significant amphipod toxicity in 2 of 4 tests. No significant urchin toxicity (4 tests) (Hunt et al., 1998b).  
*Spatial Representation:* Spatial distribution of samples is described in the report  
*Temporal Representation:* Data collected during 4/95- 4/97.  
*Data Quality Assessment:* Used BPTCP QA/QC.

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## Region 2

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**Water Segment:** Oakland Inner Harbor (Pacific Dry-dock Yard 1 Site, part of SF Bay, Central)

**Pollutant:** Lead

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.6 of the Listing Policy. Under section 4.6 two lines of evidence are necessary to assess listing status.

Two lines of evidence is available in the administrative record to assess this pollutant. One sample exceeds the sediment guideline but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy. The sediments at this site are toxic.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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 sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. One sample exceeded the guideline. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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*Numeric Line of Evidence* Pollutant-Sediment

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

*Evaluation Guideline:* Probable Effects Level of 112.18 ug/g was used (McDonald et al., 1996).  
*Data Used to Assess Water Quality:* One sample exceeds the sediment quality guideline (Hunt et al., 1998-b).  
*Spatial Representation:* Spatial distribution of samples is described in the report  
*Temporal Representation:* Data collected during 4/95- 4/97.  
*Data Quality Assessment:* Used BPTCP QA/QC.

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***Numeric Line of Evidence*** Toxicity  
*Beneficial Use:* ES - Estuarine Habitat  
*Matrix:* Sediment  
*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  
  
There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.  
  
*Evaluation Guideline:* BPTCP reference envelope approach used.  
*Data Used to Assess Water Quality:* Significant amphipod toxicity in 2 of 4 tests. No significant urchin toxicity (4 tests) (Hunt et al., 1998b).  
*Spatial Representation:* Spatial distribution of samples is described in the report  
*Temporal Representation:* Data collected during 4/95- 4/97.  
*Data Quality Assessment:* Used BPTCP QA/QC.

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## Region 2

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**Water Segment:** Oakland Inner Harbor (Pacific Dry-dock Yard 1 Site, part of SF Bay, Central)

**Pollutant:** Mercury

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.6 of the Listing Policy. Under section 4.6 two lines of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One sample exceeds the sediment guideline but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy. The sediments at this site are toxic.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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 sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. One of two samples exceeded the guideline. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy. The sediments are toxic in 2 of 4 tests.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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*Numeric Line of Evidence* Pollutant-Sediment

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

*Evaluation Guideline:* Sediment guideline of 2.1 ug/g was used (PTI Environmental Services, 1991).  
*Data Used to Assess Water Quality:* One of 2 samples exceed the sediment quality guideline.(Hunt et al., 1998b).  
*Spatial Representation:* Spatial distribution of samples is described in the report  
*Temporal Representation:* Data collected during 4/95- 4/97.  
*Data Quality Assessment:* Used BPTCP QA/QC.

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***Numeric Line of Evidence*** Toxicity  
*Beneficial Use:* ES - Estuarine Habitat  
*Matrix:* Sediment  
*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  
  
There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.  
  
*Evaluation Guideline:* BPTCP reference envelope approach used.  
*Data Used to Assess Water Quality:* Significant amphipod toxicity in 2 of 4 tests. No significant urchin toxicity (4 tests) (Hunt et al., 1998b).  
*Spatial Representation:* Spatial distribution of samples is described in the report  
*Temporal Representation:* Data collected during 4/95- 4/97.  
*Data Quality Assessment:* Used BPTCP QA/QC.

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## Region 2

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**Water Segment:** Oakland Inner Harbor (Pacific Dry-dock Yard 1 Site, part of SF Bay, Central)

**Pollutant:** Polychlorinated biphenyls

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.6 of the Listing Policy. Under section 4.6 two lines of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One sample exceeds the sediment guideline but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy. The sediments at this site are toxic.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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 sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. One sample exceeded the guideline. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy. The sediments are toxic in 2 of 4 tests.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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*Numeric Line of Evidence* Pollutant-Sediment

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

*Evaluation Guideline:* Sediment guideline of 400 ng/g used (McDonald et al., 2000).  
*Data Used to Assess Water Quality:* One sample exceeds the sediment guideline (Hunt et al., 1998b).  
*Spatial Representation:* Spatial distribution of samples is described in the report  
*Temporal Representation:* Data collected in 1997.  
*Data Quality Assessment:* Used BPTCP QA/QC.

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***Numeric Line of Evidence*** Toxicity  
*Beneficial Use:* ES - Estuarine Habitat  
*Matrix:* Sediment  
*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  
  
There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.  
  
*Evaluation Guideline:* BPTCP reference envelope approach used.  
*Data Used to Assess Water Quality:* Significant amphipod toxicity in 2 of 4 tests. No significant urchin toxicity (4 tests) (Hunt et al., 1998b).  
*Spatial Representation:* Spatial distribution of samples is described in the report  
*Temporal Representation:* Data collected during 4/95- 4/97.  
*Data Quality Assessment:* Used BPTCP QA/QC.

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## Region 2

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**Water Segment:** Oakland Inner Harbor (Pacific Dry-dock Yard 1 Site, part of SF Bay, Central)

**Pollutant:** Polycyclic Aromatic Hydrocarbons (PAHs) (Aquatic Ecosystems)

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.6 of the Listing Policy. Under section 4.6 two lines of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One sample exceeds the sediment guideline but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy. The sediments at this site are toxic.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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 sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. One sample exceeded the guideline. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy. The sediments are toxic in 2 of 4 tests.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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*Numeric Line of Evidence* Pollutant-Sediment

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

*Evaluation Guideline:* ERM of 9,600 ng/g used (Long et al., 1995).  
*Data Used to Assess Water Quality:* One sample exceeded the sediment quality guideline (Hunt et al., 1998b).  
*Spatial Representation:* Spatial distribution of samples is described in the report  
*Temporal Representation:* Data collected in 1997.  
*Data Quality Assessment:* Used BPTCP QA/QC.

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***Numeric Line of Evidence*** Toxicity  
*Beneficial Use:* ES - Estuarine Habitat  
*Matrix:* Sediment  
*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  
  
There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.  
  
*Evaluation Guideline:* BPTCP reference envelope approach used.  
*Data Used to Assess Water Quality:* Significant amphipod toxicity in 2 of 4 tests. No significant urchin toxicity (4 tests) (Hunt et al., 1998b).  
*Spatial Representation:* Spatial distribution of samples is described in the report  
*Temporal Representation:* Data collected during 4/95- 4/97.  
*Data Quality Assessment:* Used BPTCP QA/QC.

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## Region 2

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**Water Segment:** Oakland Inner Harbor (Pacific Dry-dock Yard 1 Site, part of SF Bay, Central)

**Pollutant:** Zinc

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.6 of the Listing Policy. Under section 4.6 two lines of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One sample exceeds the sediment guideline but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy. The sediments at this site are toxic.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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 sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. One sample exceeded the guideline. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy. The sediments are toxic in 2 of 4 tests.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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*Numeric Line of Evidence* Pollutant-Sediment

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

*Evaluation Guideline:* ERM of 410 ug/g used (Long et al., 1995).  
*Data Used to Assess Water Quality:* One of 2 samples exceed the sediment guideline (Hunt et al., 1998b).  
*Spatial Representation:* Spatial distribution of samples is described in the report  
*Temporal Representation:* Data collected during 4/95- 4/97.  
*Data Quality Assessment:* Used BPTCP QA/QC.

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***Numeric Line of Evidence*** Toxicity  
*Beneficial Use:* ES - Estuarine Habitat  
*Matrix:* Sediment  
*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  
  
There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.  
  
*Evaluation Guideline:* BPTCP reference envelope approach used.  
*Data Used to Assess Water Quality:* Significant amphipod toxicity in 2 of 4 tests. No significant urchin toxicity (4 tests) (Hunt et al., 1998b).  
*Spatial Representation:* Spatial distribution of samples is described in the report  
*Temporal Representation:* Data collected during 4/95- 4/97.  
*Data Quality Assessment:* Used BPTCP QA/QC.

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## Region 2

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**Water Segment:** Pacific Ocean at Rockaway Beach

**Pollutant:** Coliform Bacteria

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.3 of the Listing Policy. Under section 4.3 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Three of the samples exceed the water quality objective but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 23 samples exceeded the coliform water quality objective. At least 26 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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***Numeric Line of Evidence*** Pollutant-Water

***Beneficial Use:*** R1 - Water Contact Recreation

***Matrix:*** Water

***Water Quality Objective/  
Water Quality Criterion:*** Ocean Plan: Samples of water from each sampling station shall have a density of total coliform organisms less than 1,000 per 100 ml (10 per ml); provided that not more than 20 percent 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) (SWRCB, 2001).

***Data Used to Assess Water Quality:*** Three of 23 sample exceeded the objective. Samples exceeding were collected during dry-weather season (SWRCB, 2003).

*Spatial Representation:*

Data was spatially collected.

*Temporal Representation:*

Data was collected from 5/2000-10/2000.

*Data Quality Assessment:*

San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.

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## Region 2

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**Water Segment:** Pescadero Creek

**Pollutant:** Sedimentation/Siltation

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for delisting under sections 4.9 and 4.11 of the Listing Policy.

Six lines of evidence are available in the administrative record to assess this pollutant. The original listing was based on a recommendation to list by the Department of Fish and Game. The available data, the water body has optimal or suboptimal habitat to support salmonids and generally good insect community even though sedimentation from past practices will continue for some time. Summer measurements of turbidity measurements did not exceed evaluation guidelines for the protection of salmonids. There is limited habitat for Coho because of the lack of deep pools, spawning gravels, and large woody debris.

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

This conclusion is based on the staff findings that:

1. The biological assessments used comply with the requirements of the Listing Policy (section 6.1.5.8).
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Even though most of the samples indicate optimal or suboptimal fish habitat and the benthic bioassessments indicate most of the samples have good or excellent ratings, there are still potential impacts on Coho related to lack of suitable spawning habitat.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

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

### Lines of Evidence:

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*Numeric Line of Evidence* Pollutant-Water

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

*Matrix:* Water

*Water Quality Objective/* Basin Plan: Waters shall be free of changes in turbidity that cause nuisance or

<i>Water Quality Criterion:</i>	adversely affect beneficial uses. Increases from normal background light penetration or turbidity relatable to waste discharge shall not be greater than 10 percent in areas where natural turbidity is greater than 50 NTU (SFBRWQCB, 1995).
<i>Evaluation Guideline:</i>	The WQOs address conditions both in the water column (sediment and turbidity narratives). Published sedimentation thresholds can be used as appropriate interpretive evaluation guidelines. The evaluation guideline used to determine turbidity exceedance is from published-peer reviewed paper, "The Effects of Chronic Turbidity on Density and Growth of Steelheads and Coho Salmon", John W Sigler, et.al.1984. The guideline is as follows "In our studies, as little as 25 NTUs of turbidity caused a reduction in fish growth." (NTU is nephelometric turbidity units). Sigler also discusses the result of turbidities in the 25-50 NTU range reduced growth and caused more newly emerged salmonids to emigrate from laboratory streams than did clear water (Sigler et al. 1984). Bisson and Bilby (1982) reported that juvenile coho salmon avoided water with turbidities that exceeded 70 NTU. Berg and Northcote (1985, as cited in Meehan 1991) reported that feeding and territorial behavior of juvenile coho salmon were disrupted by short-term exposures (2.5-4.5 days) to turbid water with up to 60 NTU.
<i>Data Used to Assess Water Quality:</i>	One of 8 data values exceed the secondary MCL for turbidity. Smallest = 1.24, largest = 5.28 (NTU). Average = 2.74 (NTU). Comparison to the "changes in turbidity" objective cannot be made because background information is not available. None of the measurements exceed the 25 NTU evaluation guideline (Environmental Science Associates, 2004).
<i>Spatial Representation:</i>	Eight sample sites along the Creek and its immediate tributaries (14 total Pescadero and Butano SWAMP program sites were used.)
<i>Temporal Representation:</i>	ESA (Environmental Science Associates) survey made in summer, August 21 to September 24, 2003.
<i>Data Quality Assessment:</i>	Methodology discussed in ESA 2004 report.

<b><i>Numeric Line of Evidence</i></b>	Population/Community Degradation
<i>Beneficial Use:</i>	CO - Cold Freshwater Habitat, WI - Wildlife Habitat
<i>Matrix:</i>	-N/A
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce significant alterations in population or community ecology or receiving water biota (SFBRWQCB, 1995).
<i>Evaluation Guideline:</i>	Bioassessment guidelines from the following publication were used:  [California Department of Fish and Game (CDFG), 1999]
<i>Data Used to Assess Water Quality:</i>	Metric values from 18 sample sites for taxonomic richness, dominant taxon, members of three major benthic invertebrate families, a sensitive taxa index, the Shannon Diversity index, and tolerance value were scored and the 132 scores (6 scores for each sample site) summed to derive total scores for each site. Total scores were then used to assign "poor," "fair," "good," or "excellent" condition grades to each site along the Creek (SWAMP, 2004).  Total sample site scores ranged from 10 to 28. The average score was 20.4,

which is equivalent to a "good" rating. One site was rated "poor." Two sites were rated "fair." Eight sites were "good" and seven sites were "excellent."

<i>Spatial Representation:</i>	18 sample sites along the Creek and its immediate tributaries (14 total Pescadero and Butano SWAMP program sites were used.) (ESA, 2004).
<i>Temporal Representation:</i>	SWAMP assessment made in April 2002. DFG assessments made in 1995. ESA (Environmental Science Associates) survey made in summer (August 21 to September 24) 2003.
<i>Environmental Conditions:</i>	April 2002 SWAMP data is not directly comparable to summer 2003 data. Habitat conditions in summer 2003 were evaluated at each site.
<i>Data Quality Assessment:</i>	California Stream Bioassessment Protocols (CDFG 1999) used (in 2002 and 2003 surveys). SWAMP QAPP was used.

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<b><i>Numeric Line of Evidence</i></b>	Population/Community Degradation
<i>Beneficial Use:</i>	CO - Cold Freshwater Habitat
<i>Matrix:</i>	-N/A
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall remain free of toxic substances in concentrations that are lethal to or that produce significant alterations in population or community ecology or receiving water biota (SFBRWQCB, 1995).
<i>Data Used to Assess Water Quality:</i>	Assessments of physical habitat quality, biotic conditions, pool habitat quality, and water quality in the Pescadero-Butano watershed revealed the following overall fisheries habitat conditions currently present in the watershed: (1) Accessible salmonid habitat is fairly abundant throughout the watershed, (2) salmonid habitat quality is higher in the mid and upper Pescadero Creek watershed and lower in the Butano Creek watershed as well as the low gradient reaches of Pescadero Creek, (3) pool habitat is fairly abundant but of limited depth and suboptimal cover, (4) water quality throughout both watersheds is generally adequate for salmonids and other aquatic organisms.  The primary limiting factors with regards to salmonid habitat, based on the sampled reaches, are generally shallow pool depths, limited amounts and frequency of large woody debris, and relatively high levels of fine sediments. These limiting factors are likely to be of greater significance to coho salmon than steelhead. Coho in particular require deep pools with low water velocities and adequate cover for survival and growth while steelhead are more adapted to occupying and foraging in the faster and shallower areas of stream channels. Thus, current habitat conditions in the watershed favor steelhead over coho salmon.
<i>Spatial Representation:</i>	Eighteen sites along the creek and in small tributaries.
<i>Temporal Representation:</i>	Data and information collected in 2002 and 2003.
<i>Data Quality Assessment:</i>	SWAMP quality assurance and comparable ESA methods.

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<b><i>Line of Evidence</i></b>	Narrative Description Data
<i>Beneficial Use</i>	CO - Cold Freshwater Habitat, MU - Municipal & Domestic, WA - Warm Freshwater Habitat

<i>Information Used to Assess Water Quality:</i>	<ol style="list-style-type: none"> <li>1. Analysis of the flood record on Pescadero Creek (1951 through 2001).</li> <li>2. Analysis of changes in streambed elevation at the gauging station (1951 through 2001).</li> </ol>
<i>Non-Numeric Objective:</i>	<p>Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses (SFBRWQCB, 1995).</p> <p>Turbidity Objective: "Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases from normal background light penetration or turbidity attributable to waste discharge shall not be greater than 10 percent in areas where natural turbidity is greater than 50 NTU."</p>
<i>Data Used to Assess Water Quality:</i>	<p>Graphs of "Maximum Annual Flood Peaks Greater than Bankfull as a Ratio to the Mean Annual Flood" and "Maximum Annual Flood Peaks Greater than Bankfull as a Ratio to the Mean Annual Flood" appear to show that flooding continues to be periodic and occasional (e.g., Pages 4-5, 4-6).</p> <p>Sediment Source Investigation (e.g., Analysis of aerial photos).</p> <p>"Erosional features associated with land management account for by far the greatest sediment delivery volumes from the watershed." (Page 6-48).</p> <p>"The sandstone and mixed lithology HGUs that underlie much of the forested area of the watershed may continue to produce relatively large quantities of sediment for some time." (Page 6-49).</p> <p>"While erosion and sediment delivery resulting from past management will likely continue for some time, there should be an overall decrease in sediment delivery to stream channels as land use practices continue to improve and as degraded lands recover both naturally and through proactive treatments." (Pages 6-49, 6-50).</p>
<i>Spatial Representation:</i>	Single USGS gauging station, "Pescadero Creek," located at a bridge on Pescadero Road, 3.0 miles east of the town of Pescadero and 5.3 miles upstream of the mouth of Pescadero Creek.
<i>Temporal Representation:</i>	Series of annual maximum instantaneous flood peaks (annual flood series) for the 1952 through the 2001 water years.

<b><i>Line of Evidence</i></b>	Testimonial Evidence
<i>Beneficial Use</i>	CO - Cold Freshwater Habitat, WA - Warm Freshwater Habitat
<i>Information Used to Assess Water Quality:</i>	<p>In 1998 a letter was sent to RWQCB staff from the California Department of Fish and Game requesting that several waters be added to the section 303(d) list because of the threats to Coho salmon and steelhead. The letter states:</p> <p>"...The Federal listing of both Coho salmon and steelhead as threatened species confirms the grave condition of these economically and intrinsically valuable fish populations. ...If these species are to survive, we must act now to improve aquatic habitat where it is most critical, namely in major rivers tributary to the Bay and ocean."</p> <p>The letter goes on to identify siltation as a problem in Pescadero and Butano Creeks. No data are provided or analyzed to support the conclusion that siltation</p>



is a water quality problem.

*Non-Numeric Objective:*

Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses (SFBRWQCB, 1995).

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***Line of Evidence***

Pollutant-Sediment

*Beneficial Use*

CO - Cold Freshwater Habitat, WA - Warm Freshwater Habitat

*Information Used to Assess Water Quality:*

From the RWQCB: More than 80 percent of the estimated total sediment delivery to the channel network during the past two decades is associated with human land use activities. Much of this sediment is controllable (gullies associated with historical hillside agriculture, active and abandoned rural earth-surfaced roads, etc.).

*Non-Numeric Objective:*

Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

Waters shall not contain substances in concentrations that result in the deposition of material that cause nuisance or adversely affect beneficial uses.

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***Line of Evidence***

Testimonial Evidence

*Beneficial Use*

CO - Cold Freshwater Habitat

*Information Used to Assess Water Quality:*

From the RWQCB: (1) There is little suitable habitat at present within the creek for coho salmon, and primary hypothesized limiting factors (for coho) are lack of good cover and deep pools, the second factor of which is in part related to an abundant total and fine sediment supply; (2) Coho salmon are state listed as endangered south of the Golden Gate, and federally listed as threatened. Two-of-three brood years are believed to be extinct within Pescadero and Butano Creeks, and the third brood year appears to have a tenuous presence. (3) Although the steelhead trout run in both creeks does not appear to be immediately threatened by local extinction, run-size is substantially reduced from historical values by a variety of limiting factors including a lack of large woody debris and substantial increase in total and fine sediment supply.

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## Region 2

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**Water Segment:** San Gregorio Creek

**Pollutant:** Coliform Bacteria

**Decision:** Do Not 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. 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 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. High percentages of samples exceeded the total and fecal coliform water quality objectives and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

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

### Lines of Evidence:

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*Numeric Line of Evidence*

Pollutant-Water

*Beneficial Use:*

R1 - Water Contact Recreation

*Matrix:*

Water

*Water Quality Objective/  
Water Quality Criterion:*

Basin Plan objectives (SFBRWQCB, 1995)  
Fecal coliform  
Log mean <200 MPN/100ml  
90th percentile <400 MPN/100ml  
Total coliform  
Log mean <240 MPN/100ml  
90th percentile >10,000 MPN/100ml

*Data Used to Assess Water Quality:*

Fifty-six samples for total coliform, 23 samples for fecal coliform, 22 samples for E. coli. Basin Plan objectives violated in 2% samples for total coliform maximum. Objectives violated in 73% samples for total coliform median. Basin Plan objectives violated in 26% samples for fecal coliform geomean. Objectives

violated in 43% samples for fecal coliform in dry-weather months. E. coli data show 45% samples for total coliform maximum designated beach violated the Basin Plan Objectives. Basin Plan objectives violated in 45% samples for E. coli maximum moderately-used beach, violated in 18% samples for maximum lightly-used beach and violated in 45% samples for maximum infrequently-used beach, in dry weather months (SWRCB, 2003).

*Spatial Representation:*

Data was spatially collected.

*Temporal Representation:*

Data was collected from 9/28/98-10/31/00.

*Data Quality Assessment:*

San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.

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## Region 2

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<b>Water Segment:</b>	San Leandro Bay (part of SF Bay, Central)
<b>Pollutant:</b>	Lead
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for removal from the section 303(d) list under sections 4.6 and 4.9 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess delisting status while under section 4.9, a minimum of two lines of evidence are needed to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant sediment toxicity and the pollutant concentration exceeds the sediment guideline. The benthic community is not impacted.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.</li><li>2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>4. Four of 7 samples exceeded the sediment guideline, 3 of 7 samples exhibit toxicity, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.</li><li>5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	<p>All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.</p> <p>There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success,</p>

	larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	BPTCP Reference envelope approach.
<i>Data Used to Assess Water Quality:</i>	Significant amphipod toxicity in 3 of 7 tests. Significant sea urchin toxicity in 3 of 7 tests (Hunt et al., 1998b).
<i>Spatial Representation:</i>	Data was synoptically collected with chemical and toxicity measurements.
<i>Temporal Representation:</i>	Samples were collected in April 1995 and April 1997.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

<b><i>Numeric Line of Evidence</i></b>	Population/Community Degradation
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	Evaluations of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community.
<i>Data Used to Assess Water Quality:</i>	BPTCP benthic index values were 0.60, 0.60, 0.67, 1.0, and 0.66 (Hunt et al, 1998b).
<i>Spatial Representation:</i>	Five stations. Data was synoptically collected with chemical and toxicity measurements.
<i>Temporal Representation:</i>	Samples were collected in April 1995 and April 1997.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

<b><i>Numeric Line of Evidence</i></b>	Pollutant-Sediment
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

<i>Evaluation Guideline:</i>	Probable Effects Level of 112.18 ug/g was used (MacDonald et al., 1996).
<i>Data Used to Assess Water Quality:</i>	Four of 7 measurements exceeded the sediment quality guideline (Hunt et al., 1998b).
<i>Spatial Representation:</i>	Data was synoptically collected with benthic community and toxicity measurements.
<i>Temporal Representation:</i>	Samples were collected in April 1995 and April 1997.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

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## Region 2

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<b>Water Segment:</b>	San Leandro Bay (part of SF Bay, Central)
<b>Pollutant:</b>	Mercury
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for delisting under sections 4.6 and 4.9 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess listing status while under section 4.9, a minimum of two lines of evidence are needed to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the water body has significant sediment toxicity and it cannot be determined if the pollutant causes or contributes to any toxic effect.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.</li><li>2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>4. None of 7 samples exceeded the sediment guideline, 3 of 7 samples exhibit toxicity, and these do not meet the minimum data required for delisting as presented in Table 4.1 of the Listing Policy.</li><li>5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.
<b>Lines of Evidence:</b>	

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<i>Numeric Line of Evidence</i>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	<p>All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.</p> <p>There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any</p>

	other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	BPTCP Reference envelope approach.
<i>Data Used to Assess Water Quality:</i>	Significant amphipod toxicity in 3 of 7 tests. Significant sea urchin toxicity in 3 of 7 tests (Hunt et al., 1998b).
<i>Spatial Representation:</i>	Data was synoptically collected with chemical and toxicity measurements.
<i>Temporal Representation:</i>	Samples were collected in April 1995 and April 1997.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

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<b><i>Numeric Line of Evidence</i></b>	Population/Community Degradation
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	Evaluations of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community.
<i>Data Used to Assess Water Quality:</i>	BPTCP benthic index values were 0.60, 0.60, 0.67, 1.0, and 0.66 (Hunt et al, 1998b).
<i>Spatial Representation:</i>	Five stations. Data was synoptically collected with chemical and toxicity measurements.
<i>Temporal Representation:</i>	Samples were collected in April 1995 and April 1997.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Sediment
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	Sediment quality guideline of 2.1 ug/g was used (PTI Environmental Services,



	1991).
<i>Data Used to Assess Water Quality:</i>	None of 7 measurements exceeded the sediment quality guideline. In previous BPTCP analyses the guideline used was much lower than the guideline used in the current analysis (Hunt et al., 1998b).
<i>Spatial Representation:</i>	Data was synoptically collected with benthic community and toxicity measurements.
<i>Temporal Representation:</i>	Samples were collected in April 1995 and April 1997.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

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## Region 2

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<b>Water Segment:</b>	San Leandro Bay (part of SF Bay, Central)
<b>Pollutant:</b>	Polycyclic Aromatic Hydrocarbons (PAHs) (Aquatic Ecosystems)
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for removal from the section 303(d) list under sections 4.6 and 4.9 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess delisting status while under section 4.9, a minimum of two lines of evidence are needed to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant sediment toxicity and the pollutant concentration may not exceed the sediment guideline. Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification against removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.</li><li>2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>4. Two of 7 samples exceeded the sediment guideline and this does not meet the minimum data required for delisting as presented in Table 4.1 of the Listing Policy.</li><li>5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.
<b>Lines of Evidence:</b>	

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<b><i>Numeric Line of Evidence</i></b>	Toxicity
<b><i>Beneficial Use:</i></b>	ES - Estuarine Habitat
<b><i>Matrix:</i></b>	Sediment
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	<p>All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.</p> <p>There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.</p>
<b><i>Evaluation Guideline:</i></b>	BPTCP Reference envelope approach.

*Data Used to Assess Water Quality:* Significant amphipod toxicity in 3 of 7 tests. Significant sea urchin toxicity in 3 of 7 tests (Hunt et al., 1998b).

*Spatial Representation:* Data was synoptically collected with chemical and toxicity measurements.

*Temporal Representation:* Samples were collected in April 1995 and April 1997.

*Data Quality Assessment:* BPTCP Quality Assurance Project Plan.

***Numeric Line of Evidence*** Population/Community Degradation

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

*Evaluation Guideline:* Evaluations of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community.

*Data Used to Assess Water Quality:* BPTCP benthic index values were 0.60, 0.60, 0.67, 1.0, and 0.66 (Hunt et al, 1998b).

*Spatial Representation:* Five stations. Data was synoptically collected with chemical and toxicity measurements.

*Temporal Representation:* Samples were collected in April 1995 and April 1997.

*Data Quality Assessment:* BPTCP Quality Assurance Project Plan.

***Numeric Line of Evidence*** Pollutant-Sediment

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.

*Evaluation Guideline:* Effects Range-Median for high molecular weight PAHs of 9,600 ng/g was used (Long et al., 1995). Probable Effects Level for low molecular weight PAHs of 1,442 ng/g was used (MacDonald et al., 1996).

*Data Used to Assess Water* Two of 7 samples exceed the guideline for high molecular weight PAHs (Hunt et

*Quality:* al., 1998).

*Spatial Representation:* Data was synoptically collected with benthic community and toxicity measurements.

*Temporal Representation:* Samples were collected in April 1995 and April 1997.

*Data Quality Assessment:* BPTCP Quality Assurance Project Plan.

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## Region 2

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<b>Water Segment:</b>	San Leandro Bay (part of SF Bay, Central)
<b>Pollutant:</b>	Zinc
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for removal from the section 303(d) list under sections 4.6 and 4.9 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess delisting status while under section 4.9, a minimum of two lines of evidence are needed to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant sediment toxicity and the pollutant concentration exceeds the sediment guideline. The benthic community is not impacted.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.</li><li>2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>4. Four of 7 samples exceeded the sediment quality guideline of 410 ug/g, 3 of 7 samples exhibit toxicity, and these exceed the allowable frequency listed in Table 4.1. In addition, at least 28 total samples are required before a pollutant can be considered for removal from the 303(d) list using the frequencies presented in table 4.1 of the Listing Policy. The benthic community in this water body is not impacted.</li><li>5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

	There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	BPTCP Reference envelope approach.
<i>Data Used to Assess Water Quality:</i>	Significant amphipod toxicity in 3 of 7 tests. Significant sea urchin toxicity in 3 of 7 tests (Hunt et al., 1998b).
<i>Spatial Representation:</i>	Data was synoptically collected with chemical and toxicity measurements.
<i>Temporal Representation:</i>	Samples were collected in April 1995 and April 1997.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

<b><i>Numeric Line of Evidence</i></b>	Population/Community Degradation
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	Evaluations of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community.
<i>Data Used to Assess Water Quality:</i>	BPTCP benthic index values were 0.60, 0.60, 0.67, 1.0, and 0.66 (Hunt et al, 1998b).
<i>Spatial Representation:</i>	Five stations. Data was synoptically collected with chemical and toxicity measurements.
<i>Temporal Representation:</i>	Samples were collected in April 1995 and April 1997.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

<b><i>Numeric Line of Evidence</i></b>	Pollutant-Sediment
<i>Beneficial Use:</i>	ES - Estuarine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.  There shall be no chronic toxicity in ambient waters. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success,

	larval development, population abundance, community composition, or any other relevant measure of the health of an organism, population, or community.
<i>Evaluation Guideline:</i>	Effects Range-Median of 410 ug/g was used (Long et al., 1995).
<i>Data Used to Assess Water Quality:</i>	Four of 7 measurements exceed the ERM (Hunt et al., 1998b).
<i>Spatial Representation:</i>	Data was synoptically collected with benthic community and toxicity measurements.
<i>Temporal Representation:</i>	Samples were collected in April 1995 and April 1997.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan.

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## Region 2

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**Water Segment:** San Pablo Reservoir

**Pollutant:** Mercury

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.5 of the Listing Policy. Under section 4.5 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. 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 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. Five of 12 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. Too few samples are available to consider delisting.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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***Numeric Line of Evidence***

Pollutant-Tissue

***Beneficial Use:***

CM - Commercial and Sport Fishing (CA)

***Matrix:***

Tissue

***Water Quality Objective/  
Water Quality Criterion:***

Basin Plan: Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in aquatic life (SFBRWQCB, 1995).

***Evaluation Guideline:***

Interim fish advisory issued Feb. 2000, USEPA screening criterion (0.3 ppm) (USEPA, 2000).

***Data Used to Assess Water Quality:***

Five of 12 composite fish-tissue samples exceed the USEPA criteria. All of the fish were trophic Level 4 samples (large mouth bass). There was also a fish advisory issued in February 2000 (TSMP, 2002).

***Temporal Representation:***

Data was collected during 11/97.



*Data Quality Assessment:*

Used California Office of Environmental Health Hazard Assessment and Contra Costa County Health Services data. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.

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## Region 2

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**Water Segment:** San Pedro Creek

**Pollutant:** Coliform Bacteria

**Decision:** Do Not 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. 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 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. Most of the samples exceeded the total and fecal water quality objectives and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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***Numeric Line of Evidence***

Pollutant-Water

***Beneficial Use:***

R1 - Water Contact Recreation

***Matrix:***

Water

***Water Quality Objective/  
Water Quality Criterion:***

Basin Plan objectives (SFBRWQCB, 1995)

Fecal coliform

Log mean <200 MPN/100ml 90th percentile <400 MPN/100ml

Total coliform

Log mean <240 MPN/100ml

90th percentile >10,000 MPN/100ml

Ocean Plan Objectives (SWRCB, 2001)

Samples of water from each sampling station shall have a density of total coliform organisms less than 1,000 per 100 ml (10 per ml); provided that not more than 20 percent 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).

*Data Used to Assess Water Quality:*

Ninety-nine samples for total coliform, 6 samples for fecal coliform, for Basin Plan data set. 41 samples for total coliform, 23 samples for fecal coliform for Ocean Plan data set. Basin Plan objectives violated in 13% samples for total coliform, 98% samples for total coliform median, and 100% violated for samples of fecal coliform geomean and fecal coliform in dry weather months (SWRCB, 2003).

Ocean Plan objectives violated in 90% of the samples for total coliform, 96% of samples for fecal coliform geomean, and 100% fecal coliform in dry weather months. E. coli data show 67% samples for total coliform maximum designated beach violated the Basin Plan Objectives. Basin Plan objectives violated in 63% samples for E. coli maximum moderately-used beach, violated in 57% samples for maximum lightly-used beach and violated in 57% samples for maximum infrequently-used beach, in dry weather months.

*Spatial Representation:*

Data was collected at 15 sampling sites.

*Temporal Representation:*

Data was collected, from 5/26/98-8/14/00, and 4/24/00-11/13/00.

*Data Quality Assessment:*

San Mateo County Environmental Health Dept. Beach Monitoring/Surfrider data/lab QA/QC used. USEPA Region IX Laboratory data used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.

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## Region 2

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**Water Segment:** San Vicente Creek

**Pollutant:** Coliform Bacteria

**Decision:** Do Not 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. 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 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. All samples exceeded the fecal and total coliform water quality objectives and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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***Numeric Line of Evidence***

Pollutant-Water

***Beneficial Use:***

R1 - Water Contact Recreation

***Matrix:***

Water

***Water Quality Objective/  
Water Quality Criterion:***

Basin Plan objectives (SFBRWQCB, 1995)  
Fecal coliform  
Log mean <200 MPN/100ml  
90th percentile <400 MPN/100ml  
Total coliform  
Log mean <240 MPN/100ml  
90th percentile >10,000 MPN/100ml

***Data Used to Assess Water  
Quality:***

Thirty-eight samples for total coliform, 22 samples for fecal coliform, and 6 samples for E. coli. E. coli data show 100% violations of the Basin Plan Objectives for total coliform maximum at all beaches in dry-weather months. Basin Plan violated in 3% of samples for total coliform maximum, 100%

samples violated for total coliform median, 100% samples violated for fecal coliform geomean and 100% samples violated for fecal coliform (REC-1). Basin Plan objectives violated in 32% of samples for fecal coliform mean, and 23% violated samples for fecal coliform (REC-2) in dry-weather months (SWRCB, 2003).

*Spatial Representation:*

Data was spatially collected.

*Temporal Representation:*

Data was collected from 10/6/98-9/26/00.

*Data Quality Assessment:*

San Mateo County Environmental Health Department. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.

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## Region 2

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**Water Segment:** Tomales Bay

**Pollutant:** Mercury

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from 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 insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-seven out of 55 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 4.1 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 not be removed from 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:

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***Numeric Line of Evidence***

Pollutant-Tissue

***Beneficial Use:***

CM - Commercial and Sport Fishing (CA)

***Matrix:***

Tissue

***Water Quality Objective/  
Water Quality Criterion:***

San Francisco Bay RWQCB Basin Plan: Many pollutants can accumulate on particles, in sediment, or bioaccumulate in fish and other aquatic organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife, and human health will be considered.

***Evaluation Guideline:***

0.3 ug/g (OEHHA Screening Value)

***Data Used to Assess Water Quality:***

Twenty-seven out of 55 samples exceeded (Health Advisory for Hg in fish and shellfish). Filet composite and individual samples were collected from the following species: bat ray, brown smooth hound shark, California halibut, cockle, jack smelt, leopard shark, Pacific angle shark, red rock crab, redbtail surfperch, and shiner surfperch. Species exceeding guideline were bat ray,

brown smooth hound shark, cockle, leopard shark, and Pacific angle shark (TSMP, 2002).

*Spatial Representation:*

Seven station were sampled: Outer Bay, Mid Bay, Blake's Landing, Hamlet, McDonald, Millerton Park, and S. Millerton Ramp.

*Temporal Representation:*

Samples were collected in 1998-99.

*Data Quality Assessment:*

Data and Quality Assurance/Quality Control Report For Trace Metals - Coastal Fish Contaminant Project Year 1, 1998-1999. Department of Fish and Game.

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Fact Sheets Supporting  
“Do Not Delist” Recommendations



September 2005



## Region 3

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**Water Segment:** Alamo Creek

**Pollutant:** Fecal Coliform

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.3 (Bacteria) of the Listing Policy. Under section 4.3 a single line of evidence is adequate to assess listing status.

At least one line of evidence is available in the administrative record to assess this pollutant. Per Table 4.2 of the Policy, at least 26 numeric samples are required in order to reliably compare data against an applicable water quality objective. However, a total of less than 26 numeric samples are available in this case.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Less than 26 samples were available for analysis. More samples are needed in order to reliably determine if a water quality objective is exceeded.
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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### **Lines of Evidence:**

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***Numeric Line of Evidence*** Pollutant-Water

***Beneficial Use:*** R1 - Water Contact Recreation

***Matrix:*** Water

***Water Quality Objective/  
Water Quality Criterion:*** Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.

***Data Used to Assess Water Quality:*** Eight of 14 samples exceed the water quality objective (CCAMP, 2004).

***Spatial Representation:*** There was one sampling site on Alamo Creek.

*Temporal Representation:* Monthly sampling events.

*Data Quality Assessment:* Central Coast Ambient Monitoring Program (CCAMP) QA/QC.

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## Region 3

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**Water Segment:** Alisal Creek (Salinas)

**Pollutant:** Fecal Coliform

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.3 (Bacteria) of the Listing Policy. Under section 4.3 a single line of evidence is adequate to assess listing status.

At least one line of evidence is available in the administrative record to assess this pollutant. Per Table 4.2 of the Policy, at least 26 numeric samples are required in order to reliably compare data against an applicable water quality objective. However, a total of less than 26 numeric samples are available in this case.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Less than 26 samples were available for analysis. More samples are needed in order to reliably determine if a water quality objective is exceeded.
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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### **Lines of Evidence:**

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***Numeric Line of Evidence*** Pollutant-Water

***Beneficial Use:*** R1 - Water Contact Recreation

***Matrix:*** Water

***Water Quality Objective/  
Water Quality Criterion:*** Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.

***Data Used to Assess Water Quality:*** Five of 6 samples exceed the water quality objective (CCAMP, 2004).

***Spatial Representation:*** There was one sampling site.

*Temporal Representation:* Summer, fall, and winter sampling events.  
*Data Quality Assessment:* CCAMP QAPP.

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## Region 3

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**Water Segment:** Alisal Creek (Salinas)

**Pollutant:** Nitrates

**Decision:** Do Not 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 adequate to assess listing status.

At least one line of evidence is available in the administrative record to assess this pollutant. Per Table 4.1 of the Policy, at least 28 numeric samples are required in order to reliably compare data against an applicable water quality objective. However, a total of less than 28 numeric samples are available in this case.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Less than 28 samples were available for analysis. More samples are needed in order to reliably determine if a water quality objective is exceeded.
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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

**Lines of Evidence:**

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	MU - Municipal & Domestic
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	Primary MCL -- 45.0 mg/L (as nitrate)
<i>Data Used to Assess Water</i>	Six samples, five exceedances (CCAMP, 2004).

*Quality:*

*Spatial Representation:* 1 sample site.

*Temporal Representation:* Monthly sampling. Sample taken from 7/28/99-2/10/00.

*Data Quality Assessment:* CCAMP.

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## Region 3

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**Water Segment:** Arroyo Burro Creek

**Pollutant:** Pathogens

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. 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 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. Fourteen of 33 total samples exceeded the REC-1 fecal coliform water quality objective and this exceeds 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 not be removed from 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:**

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***Numeric Line of Evidence*** Pollutant-Water

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

***Matrix:*** Water

***Water Quality Objective/  
Water Quality Criterion:*** Basin Plan Water Quality Objectives.  
Pathogens/Bacteria (i.e. Fecal coliform) to REC-1 Beneficial Use.

***Evaluation Guideline:*** Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than 10% of total samples during any 30-day period exceed 400/100 ml.

*Data Used to Assess Water Quality:*

CCAMP data at Cliff drive shows 14 exceedances out of 33 total samples at our coastal confluences site (CCAMP, 2004).

*Spatial Representation:*

Cliff Drive at the Coastal Confluences site on Arroyo Burro Creek.

*Temporal Representation:*

Measurements were taken from 1/16/01 to 12/8/04.

*Data Quality Assessment:*

CCAMP data.

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### Region 3

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**Water Segment:** Atascadero Creek (San Luis Obispo County)

**Pollutant:** Dissolved oxygen saturation

**Decision:** Do Not Delist

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

At least one line of evidence is available in the administrative record to assess this pollutant. Per Table 4.2 of the Policy, at least 26 numeric samples are required in order to reliably compare data against an applicable water quality objective. However, a total of less than 26 numeric samples are available in this case.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Less than 26 samples were available for analysis. More samples are needed in order to reliably determine if a water quality objective is exceeded.
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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

**Lines of Evidence:**

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	CO - Cold Freshwater Habitat, WA - Warm Freshwater Habitat
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	Dissolved oxygen concentration shall not be reduced below 7.0 mg/L at any time.
<i>Data Used to Assess Water</i>	Twelve of 18 samples exceeded the water quality objective (CCAMP, 2004).

*Quality:*

*Spatial Representation:* There was one sampling site.

*Temporal Representation:* There was monthly sampling.

*Environmental Conditions:* Samples taken from 4/7/99 to 5/15/00 on 18 sampling dates.

*Data Quality Assessment:* CCAMP

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## Region 3

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<b>Water Segment:</b>	Atascadero Creek (San Luis Obispo County)
<b>Pollutant:</b>	Fecal Coliform
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for removal from the section 303(d) list under section 4.3 (Bacteria) of the Listing Policy. Under section 4.3 a single line of evidence is adequate to assess listing status.</p> <p>At least one line of evidence is available in the administrative record to assess this pollutant. Per Table 4.2 of the Policy, at least 26 numeric samples are required in order to reliably compare data against an applicable water quality objective. However, a total of less than 26 numeric samples are available in this case.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>3. Less than 26 samples were available for analysis. More samples are needed in order to reliably determine if a water quality objective is exceeded.</li><li>4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.
<b>Lines of Evidence:</b>	

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<b><i>Beneficial Use:</i></b>	R1 - Water Contact Recreation
<b><i>Matrix:</i></b>	Water
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.

<i>Data Used to Assess Water Quality:</i>	Four of 14 samples exceeded the water quality objectives (CCAMP, 2004).
<i>Spatial Representation:</i>	There was 1 sampling site.
<i>Temporal Representation:</i>	There were monthly sampling events.
<i>Environmental Conditions:</i>	Samples taken 4/99 to 5/00 at 16 sample dates. Some sampling dates have multiple samples.
<i>Data Quality Assessment:</i>	CCAMP

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## Region 3

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**Water Segment:** Bradley Canyon Creek

**Pollutant:** Fecal Coliform

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.3 (Bacteria) of the Listing Policy. Under section 4.3 a single line of evidence is adequate to assess listing status.

At least one line of evidence is available in the administrative record to assess this pollutant. Per Table 4.2 of the Policy, at least 26 numeric samples are required in order to reliably compare data against an applicable water quality objective. However, a total of less than 26 numeric samples are available in this case.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Less than 26 samples were available for analysis. More samples are needed in order to reliably determine if a water quality objective is exceeded.
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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

**Lines of Evidence:**

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*Numeric Line of Evidence*

Pollutant-Water

*Beneficial Use:*

R1 - Water Contact Recreation

*Matrix:*

Water

*Water Quality Objective/  
Water Quality Criterion:*

Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.

*Data Used to Assess Water Quality:* There were 7 samples collected at the Foxen Canyon Road site (CCAMP, 2004). Four of these samples exceeded the 400 MPN/100 ml criteria.

*Spatial Representation:* Three stations were sampled.

*Temporal Representation:* Sampling occurred monthly.

*Data Quality Assessment:* CCAMP data.

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## Region 3

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**Water Segment:** Bradley Channel

**Pollutant:** Fecal Coliform

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.3 (Bacteria) of the Listing Policy. Under section 4.3 a single line of evidence is adequate to assess listing status.

At least one line of evidence is available in the administrative record to assess this pollutant. Per Table 4.2 of the Policy, at least 26 numeric samples are required in order to reliably compare data against an applicable water quality objective. However, a total of less than 26 numeric samples are available in this case.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Less than 26 samples were available for analysis. More samples are needed in order to reliably determine if a water quality objective is exceeded.
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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

**Lines of Evidence:**

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*Numeric Line of Evidence* Pollutant-Water

*Beneficial Use:* R1 - Water Contact Recreation

*Matrix:* Water

*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.

<i>Data Used to Assess Water Quality:</i>	Nine of 14 samples exceeded water quality objective (CCAMP, 2004).
<i>Spatial Representation:</i>	Samples were collected from one site.
<i>Temporal Representation:</i>	Monthly sampling events from January 2000 - February 2001.
<i>Environmental Conditions:</i>	Samples taken from 1/00 to 2/01; 14 sampling dates.
<i>Data Quality Assessment:</i>	CCAMP.

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### Region 3

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**Water Segment:** Cholame Creek

**Pollutant:** Fecal Coliform

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.3 (Bacteria) of the Listing Policy. Under section 4.3 a single line of evidence is adequate to assess listing status.

At least one line of evidence is available in the administrative record to assess this pollutant. Per Table 4.2 of the Policy, at least 26 numeric samples are required in order to reliably compare data against an applicable water quality objective. However, a total of less than 26 numeric samples are available in this case.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Less than 26 samples were available for analysis. More samples are needed in order to reliably determine if a water quality objective is exceeded.
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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

**Lines of Evidence:**

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*Numeric Line of Evidence* Pollutant-Water

*Beneficial Use:* R1 - Water Contact Recreation

*Matrix:* Water

*Water Quality Objective/  
Water Quality Criterion:* Fecal Coliform WQO applicable to REC1.

*Data Used to Assess Water* Eight of 10 samples exceed water quality objectives (CCAMP, 2004).

*Quality:*

*Spatial Representation:* One site.

*Temporal Representation:* Monthly sampling events.

*Environmental Conditions:* Data age = 2-3 years old.

*Data Quality Assessment:* CCAMP

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### Region 3

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**Water Segment:** Dairy Creek

**Pollutant:** Fecal Coliform

**Decision:** Do Not Delist

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that, per Section 2.2 of the Policy, the water body-pollutant combination should not be removed from the section 303(d) list because conditions for placement in the water quality limited segment category are met and a TMDL has been developed and approved by USEPA.

**Lines of Evidence:**

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation, R2 - Non-Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Pathogens TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by USEPA on January 20, 2004.

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### Region 3

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**Water Segment:** Hernandez Reservoir

**Pollutant:** Mercury

**Decision:** Do Not Delist

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 4 samples exceeded the water quality objectives but the number of samples is insufficient to determine with the confidence and power required by 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

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

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Central Coast RWQCB Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
<i>Evaluation Guideline:</i>	0.3 ug/g (OEHHA Screening Value).
<i>Data Used to Assess Water Quality:</i>	Three out of 4 samples exceeded. Four file composite samples were collected: 2 largemouth bass, 1 channel catfish, and 1 bullhead. Bass were collected in 1995 and 2002, channel catfish in 1995, and bullhead in 2002. Only the bullhead sample did not exceed the guideline (TSMP, 2002).
<i>Spatial Representation:</i>	One station located in Lake Hernandez on the San Benito River.
<i>Temporal Representation:</i>	Samples were collected 11/30/95 and 11/7/02.

*Data Quality Assessment:*

Toxic Substances Monitoring Program 1994-95 Data Report.  
Environmental Chemistry Quality Assurance and Data Report for the Toxic  
Substances Monitoring Program, 2001-2002. Department of Fish and Game

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### Region 3

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**Water Segment:** Llagas Creek

**Pollutant:** Chloride

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.2 (Conventional and Other Pollutants) of the Listing Policy. Under section 4.2 a single line of evidence is adequate to assess delisting status.

One line of evidence is available in the administrative record to assess this pollutant. Per Table 4.2 of the Policy, a sufficient number of samples exceed the applicable water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list 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. Seventy-eight out of 78 samples exceeded the applicable chloride water quality objective and this exceeds the maximum allowable frequency necessary to delist from Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:**

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	AG - Agricultural Supply
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: 106 mg/L for chloride.
<i>Data Used to Assess Water</i>	There were a total of 78 water samples and all 78 samples exceeded the water



*Quality:* quality objective (CCAMP, 2004).  
*Spatial Representation:* There were 4 sampling stations.  
*Temporal Representation:* There were quarterly sampling events.  
*Data Quality Assessment:* South County Regional Wastewater Authority (SCRWA) QA/QC.

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### Region 3

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**Water Segment:** Llagas Creek

**Pollutant:** Fecal Coliform

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.3 (Bacteria) of the Listing Policy. Under section 4.3 a single line of evidence is adequate to assess listing status.

At least one line of evidence is available in the administrative record to assess this pollutant. Using an exceedance frequency of 10% per the Policy's binomial test results or formulae in table 4.2, a sufficient number of samples exceed the applicable bacterial objective.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-six of 41 samples exceeded the applicable bacteria water quality objective and this exceeds the maximum allowable frequency necessary to delist, as listed in or calculated from Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:**

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***Numeric Line of Evidence*** Pollutant-Water

***Beneficial Use:*** R1 - Water Contact Recreation

***Matrix:*** Water

***Water Quality Objective/  
Water Quality Criterion:*** Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.

***Data Used to Assess Water*** Forty one bacteria samples and 26 samples exceeding (63%) the water quality

*Quality:* objective (CCAMP, 2004).  
*Spatial Representation:* Three stations.  
*Temporal Representation:* Monthly sampling events.  
*Data Quality Assessment:* Central Coast Ambient Monitoring Program (CCAMP) QA/QC.

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### Region 3

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**Water Segment:** Main Street Canal

**Pollutant:** Nitrates

**Decision:** Do Not Delist

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

At least one line of evidence is available in the administrative record to assess this pollutant. Per Table 4.2 of the Policy, at least 26 numeric samples are required in order to reliably compare data against an applicable water quality objective. However, a total of less than 26 numeric samples are available in this case.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Less than 26 samples were available for analysis. More samples are needed in order to reliably determine if a water quality objective is exceeded.
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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained

**Lines of Evidence:**

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*Numeric Line of Evidence* Pollutant-Water

*Beneficial Use:* MU - Municipal & Domestic

*Matrix:* Water

*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: 45 mg/L (as Nitrate).

*Data Used to Assess Water* There were 10 water samples with 6 samples exceeding (60%) the water quality

*Quality:* objective (CCAMP, 2004).  
*Spatial Representation:* There was 1 sampling site.  
*Temporal Representation:* There were monthly sampling events.  
*Data Quality Assessment:* Central Coast Ambient Monitoring Program (CCAMP) QA/QC.

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## Region 3

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**Water Segment:** Moro Cojo Slough

**Pollutant:** Oxygen, Dissolved

**Decision:** Do Not Delist

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

At least one line of evidence is available in the administrative record to assess this pollutant. Per Table 4.2 of the Policy, at least 26 numeric samples are required in order to reliably compare data against an applicable water quality objective. However, a total of less than 26 numeric samples are available in this case.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Less than 26 samples were available for analysis. More samples are needed in order to reliably determine if a water quality objective is exceeded.
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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained

**Lines of Evidence:**

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	CO - Cold Freshwater Habitat, WA - Warm Freshwater Habitat
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	COLD: Dissolved oxygen concentration shall not be reduced below 7.0 mg/L at any time. WARM: Dissolved oxygen concentration shall not be reduced below 5.0 mg/L at any time.
<i>Data Used to Assess Water Quality:</i>	Nine of the 14 samples exceeded the water quality objective (CCAMP, 2004).

*Spatial Representation:* There was 1 sampling site. This site is tidally influenced and flow was observed moving into the slough out of the harbor (instead of flowing out to the harbor) on numerous occasions.

*Temporal Representation:* There was monthly sampling. Samples taken from 3/1/1999 to 3/7/2000 over 13 sampling dates).

*Data Quality Assessment:* Central Coast Ambient Monitoring Program (CCAMP) QA/QC.

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## Region 3

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**Water Segment:** Nacimiento Reservoir

**Pollutant:** Mercury

**Decision:** Do Not Delist

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 4 samples exceeded the water quality objectives but the number of samples is insufficient to determine with the confidence and power required by 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Central Coast RWQCB Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
<i>Evaluation Guideline:</i>	0.3 ug/g (OEHHA Screening Value).
<i>Data Used to Assess Water Quality:</i>	Four out of 4 samples exceeded. Four filet composite samples of largemouth bass were collected (TSMP, 2002). All samples exceeded the guideline.
<i>Spatial Representation:</i>	Two stations were sampled: on Dip Creek arm of Lake Nacimiento and on Las Tablas Creek arm of Lake Nacimiento.
<i>Temporal Representation:</i>	Samples were collected annually in 1992-93 and 1996.
<i>Data Quality Assessment:</i>	Toxic Substances Monitoring Program 1992-93 Data Report.





### Region 3

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**Water Segment:** Nipomo Creek

**Pollutant:** Fecal Coliform

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.3 (Bacteria) of the Listing Policy. Under section 4.3 a single line of evidence is adequate to assess listing status.

At least one line of evidence is available in the administrative record to assess this pollutant. Per Table 4.2 of the Policy, at least 26 numeric samples are required in order to reliably compare data against an applicable water quality objective. However, a total of less than 26 numeric samples are available in this case.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Less than 26 samples were available for analysis. More samples are needed in order to reliably determine if a water quality objective is exceeded.
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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained

**Lines of Evidence:**

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***Numeric Line of Evidence***

Pollutant-Water

***Beneficial Use:***

R1 - Water Contact Recreation

***Matrix:***

Water

***Water Quality Objective/  
Water Quality Criterion:***

Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.

***Data Used to Assess Water Quality:***

Twenty five bacteria samples were collected with 18 samples (72%) exceeding the water quality objective (CCAMP, 2004).

*Spatial Representation:* There were two sampling sites.  
*Temporal Representation:* There were monthly sampling events.  
*Environmental Conditions:* Data age = 1-2 years old.  
*Data Quality Assessment:* Central Coast Ambient Monitoring Program (CCAMP) QA/QC.

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## Region 3

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<b>Water Segment:</b>	Old Salinas River Estuary
<b>Pollutant:</b>	Fecal Coliform
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for removal from the section 303(d) list under section 4.3 (Bacteria) of the Listing Policy. Under section 4.3 a single line of evidence is adequate to assess listing status.</p> <p>At least one line of evidence is available in the administrative record to assess this pollutant. Per Table 4.2 of the Policy, at least 26 numeric samples are required in order to reliably compare data against an applicable water quality objective. However, a total of less than 26 numeric samples are available in this case.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>3. Less than 26 samples were available for analysis. More samples are needed in order to reliably determine if a water quality objective is exceeded.</li><li>4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.
<b>Lines of Evidence:</b>	

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	R1 - Water Contact Recreation
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.

*Data Used to Assess Water Quality:* There were nineteen samples with 6 samples exceeding the water quality objective (CCAMP, 2004).

*Spatial Representation:* There were 2 sampling stations.

*Temporal Representation:* Monthly sampling events. Samples taken from 4/99 to 2/00.

*Data Quality Assessment:* Central Coast Ambient Monitoring Program.

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## Region 3

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**Water Segment:** Old Salinas River Estuary

**Pollutant:** Oxygen, Dissolved

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.2 (Conventional and Other Pollutants) of the Listing Policy. Under section 4.2 a single line of evidence is adequate to assess delisting status.

At least one line of evidence is available in the administrative record to assess this pollutant. Per Table 4.2 of the Policy, a sufficient number of samples exceed the applicable water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list 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 out of 28 samples exceeded the applicable DO water quality objective and this exceeds the maximum allowable frequency necessary to delist from Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:**

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***Numeric Line of Evidence***

Pollutant-Water

***Beneficial Use:***

BI - Preserva.of Bio.Hab.of Spec.Signif., CO - Cold Freshwater Habitat, ES - Estuarine Habitat, MI - Fish Migration, RA - Rare & Endangered Species, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

***Matrix:***

Water

***Water Quality Objective/***

COLD: Dissolved oxygen concentration shall not be reduced below 7.0 mg/L at

<i>Water Quality Criterion:</i>	any time.  WARM: Dissolved oxygen concentration shall not be reduced below 5.0 mg/L at any time.
<i>Data Used to Assess Water Quality:</i>	Twenty-eight samples with 11 samples exceeding the water quality objectives (CCAMP, 2004).
<i>Spatial Representation:</i>	There were two sampling sites.
<i>Temporal Representation:</i>	Monthly sampling. Samples taken from 3/1/99 to 3/7/00 over 14 sampling dates.
<i>Data Quality Assessment:</i>	CCAMP.

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## Region 3

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**Water Segment:** Orcutt Creek

**Pollutant:** Fecal Coliform

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.3 (Bacteria) of the Listing Policy. Under section 4.3 a single line of evidence is adequate to assess listing status.

At least one line of evidence is available in the administrative record to assess this pollutant. Per the binomial test results or formulae in Table 4.2 of the Policy, using an exceedance frequency of 10 percent, a sufficient number of samples exceed the applicable bacterial objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list 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-one of 50 samples exceeded the applicable bacteria water quality objective and this exceeds the maximum allowable frequency necessary to delist, as listed in or calculated from Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:**

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***Numeric Line of Evidence*** Pollutant-Water

***Beneficial Use:*** R1 - Water Contact Recreation

***Matrix:*** Water

***Water Quality Objective/  
Water Quality Criterion:*** Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml,



nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.

*Data Used to Assess Water Quality:*

Thirty-one of 50 samples exceed the water quality objective (CCAMP, 2004).

*Spatial Representation:*

Three sampling sites.

*Temporal Representation:*

Monthly sampling events.

*Data Quality Assessment:*

Central Coast Ambient Monitoring Program (CCAMP) QA/QC.

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## Region 3

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**Water Segment:** Orcutt Creek

**Pollutant:** Nitrates

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.2 (Conventional and Other Pollutants) of the Listing Policy. Under section 4.2 a single line of evidence is adequate to assess delisting status.

At least one line of evidence is available in the administrative record to assess this pollutant. Per Table 4.2 of the Policy, a sufficient number of samples exceed the applicable water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list 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-one of 45 samples exceeded the applicable nitrate water quality objective and this exceeds the maximum allowable frequency necessary to delist from Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:**

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***Numeric Line of Evidence*** Pollutant-Water  
***Beneficial Use:*** MU - Municipal & Domestic  
***Matrix:*** Water  
***Water Quality Objective/  
Water Quality Criterion:*** Basin Plan: 45 mg/L (as Nitrate).

*Data Used to Assess Water Quality:* Thirty one of 45 samples exceed the water quality objective (CCAMP, 2004).

*Spatial Representation:* Three sampling sites.

*Temporal Representation:* Monthly sampling events. Samples taken from 1/12/00 to 2/28/01.

*Data Quality Assessment:* Central Coast Ambient Monitoring Program (CCAMP) QA/QC.

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### Region 3

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**Water Segment:** Oso Flaco Creek

**Pollutant:** Nitrate as Nitrate (NO3)

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. 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 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. Fifteen of 15 samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply and this exceeds 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 not be removed from 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:**

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***Numeric Line of Evidence***

Pollutant-Water

***Beneficial Use:***

MU - Municipal & Domestic

***Matrix:***

Water

***Water Quality Objective/  
Water Quality Criterion:***

Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as NO3) in Domestic or Municipal Supply is 45 mg/L).

<i>Data Used to Assess Water Quality:</i>	Fifteen out of 15 samples exceeded the water quality objective for nitrate (as NO <sub>3</sub> ) for municipal and domestic supply (CCAMP, 2004; SWAMP, 2004).
<i>Spatial Representation:</i>	Samples collected from one site.
<i>Temporal Representation:</i>	Samples were collected from February 2000 to March 2001.
<i>Environmental Conditions:</i>	The water body is located in the Santa Maria hydrologic unit, Guadalupe hydrologic area, Guadalupe hydrologic subarea. The site is located at Little Oso Flaco Creek (312 OFN) and is tributary to Oso Flaco Creek.
<i>Data Quality Assessment:</i>	CCAMP, SWAMP QAPP.

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### Region 3

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**Water Segment:** Oso Flaco Lake

**Pollutant:** Nitrates

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for delisting under sections 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Fish kills, algae and other evidence of eutrophication have been witnessed by the RWQCB at this site.

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

This conclusion is based on the staff findings that:

1. A numeric water quality objective or evaluation guideline is not available that complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. RWQCB collected 16 samples at one location.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list.

**Lines of Evidence:**

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*Numeric Line of Evidence* Pollutant-Water

*Beneficial Use:* GW - Groundwater Recharge

*Matrix:* Water

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

*Evaluation Guideline:* The 45 mg/L MCL for nitrates should be used.

*Data Used to Assess Water Quality:* Sixteen samples were collected (CCAMP, 2004).

*Spatial Representation:* There was one sampling station.

*Temporal Representation:* There were monthly sampling events.

*Environmental Conditions:* Fish kills, algae and other evidence of eutrophication have been witnessed by the RWQCB at this site.

*Data Quality Assessment:* Central Coast Ambient Monitoring Program (CCAMP) QA/QC.

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### Region 3

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**Water Segment:** Salinas Reclamation Canal

**Pollutant:** Fecal Coliform

**Decision:** Do Not Delist

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

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 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. Thirty-three of 37 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Lines of Evidence:**

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***Numeric Line of Evidence*** Pollutant-Water

***Beneficial Use:*** R1 - Water Contact Recreation

***Matrix:*** Water

***Water Quality Objective/  
Water Quality Criterion:*** Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.

***Data Used to Assess Water Quality:*** Thirty three of 37 samples exceeded the water quality objective (CCAMP, 2004).



*Spatial Representation:* Three stations.  
*Temporal Representation:* Monthly sampling events.  
*Data Quality Assessment:* Central Coast Ambient Monitoring Program (CCAMP) QA/QC.

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### Region 3

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**Water Segment:** Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

**Pollutant:** Fecal Coliform

**Decision:** Do Not Delist

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

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 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. Fourteen of 54 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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***Numeric Line of Evidence***

Pollutant-Water

***Beneficial Use:***

R1 - Water Contact Recreation

***Matrix:***

Water

***Water Quality Objective/  
Water Quality Criterion:***

Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.

***Data Used to Assess Water***

Fourteen of 54 samples exceeded the water quality objective (CCAMP, 2004).

*Quality:*

*Spatial Representation:*

Four stations.

*Temporal Representation:*

Monthly sampling events. Samples taken from 2/99 to 2/00; 13 sampling dates (some sampling dates have multiple samples).

*Data Quality Assessment:*

Central Coast Ambient Monitoring Program (CCAMP) QA/QC.

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### Region 3

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**Water Segment:** Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

**Pollutant:** Chloride

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. 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 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. Forty-two of 42 samples exceeded the water quality objective and this exceeds 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 not be removed from 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:

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	MU - Municipal & Domestic
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: 20 mg/L.
<i>Data Used to Assess Water Quality:</i>	Forty-two of 42 samples exceeded the water quality objective (CCAMP, 2004).
<i>Spatial Representation:</i>	Three stations.
<i>Temporal Representation:</i>	Monthly sampling events.
<i>Data Quality Assessment:</i>	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.

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### Region 3

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**Water Segment:** Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

**Pollutant:** Sodium

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. 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 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. Thirty-two of 32 samples exceed the water quality objective and this exceeds 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 not be removed from 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:

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	AG - Agricultural Supply
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: 20 mg/L.
<i>Data Used to Assess Water Quality:</i>	Thirty-two of 32 samples exceed the water quality objective (CCAMP, 2004).
<i>Spatial Representation:</i>	Three stations.
<i>Temporal Representation:</i>	Monthly sampling.
<i>Data Quality Assessment:</i>	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.

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## Region 3

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**Water Segment:** San Lorenzo Creek

**Pollutant:** Boron

**Decision:** Do Not Delist

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

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 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. 10 of 10 samples exceeded the Basin Plan water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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***Numeric Line of Evidence***

Pollutant-Water

***Beneficial Use:***

AG - Agricultural Supply

***Matrix:***

Water

***Water Quality Objective/  
Water Quality Criterion:***

Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Region 3 Basin Plan, Section II.A.2 Objectives for all inland surface waters, enclosed bay, and estuaries, page III-5). In Table 3-4 of the Basin Plan (page III-9), the maximum concentration for boron for irrigation supply is 0.75 mg/L.

***Data Used to Assess Water Quality:***

Ten out of 15 samples exceeded the water quality objective for agricultural water use/ irrigation supply for boron (CCAMP, 2004; SWAMP, 2004).

***Spatial Representation:***

Samples were collected from two sites. Exceedances were detected in samples

collected from both sites.

*Temporal Representation:*

Samples were collected from July 1999 through February 2000.

*Environmental Conditions:*

The water body is located in the Salinas hydrologic unit, Gabilan Range hydrologic area, Gabilan Range hydrologic subarea. Monitoring sites are located at San Lorenzo Creek at First Street in King City (309LOK), and San Lorenzo Creek at Bitterwater Road east of King City (309LOR).

*Data Quality Assessment:*

CCAMP, SWAMP QAPP.

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### Region 3

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**Water Segment:** Santa Maria River

**Pollutant:** Fecal Coliform

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. 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 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. Seventeen of 33 samples exceeded the water quality objective and this exceeds 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. and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:**

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***Numeric Line of Evidence*** Pollutant-Water

***Beneficial Use:*** R1 - Water Contact Recreation

***Matrix:*** Water

***Water Quality Objective/  
Water Quality Criterion:*** Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.

***Data Used to Assess Water Quality:*** Seventeen of 33 samples exceeded the water quality objective (CCAMP, 2004).

***Spatial Representation:*** Three stations.



*Temporal Representation:* Monthly sampling events.

*Data Quality Assessment:* Central Coast Ambient Monitoring Program (CCAMP) QA/QC.

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## Region 3

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**Water Segment:** Santa Maria River

**Pollutant:** Nitrates

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. 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 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. Twenty-three of 23 samples exceeded the water quality objective and this exceeds 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 not be removed from 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:

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***Numeric Line of Evidence*** Pollutant-Water

***Beneficial Use:*** MU - Municipal & Domestic

***Matrix:*** Water

***Water Quality Objective/  
Water Quality Criterion:*** Basin Plan: 45 mg/l (as Nitrate).

***Data Used to Assess Water  
Quality:*** Twenty-three of 23 samples exceeded the water quality objective (CCAMP, 2004).

***Spatial Representation:*** Two to three sampling sites.

***Temporal Representation:*** Monthly sampling events.

***Data Quality Assessment:*** Central Coast Ambient Monitoring Program (CCAMP) QA/QC.

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## Region 3

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**Water Segment:** Tembladero Slough

**Pollutant:** Fecal Coliform

**Decision:** Do Not Delist

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

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 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. Five of 8 samples exceeded the water quality objective and this exceeds 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 not be removed from 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:**

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***Numeric Line of Evidence*** Pollutant-Water

***Beneficial Use:*** R1 - Water Contact Recreation

***Matrix:*** Water

***Water Quality Objective/  
Water Quality Criterion:*** Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.

***Data Used to Assess Water Quality:*** Five of 8 samples exceeded the water quality objective (CCAMP, 2004).

*Spatial Representation:* One sampling site.  
*Temporal Representation:* Monthly sampling events.  
*Data Quality Assessment:* Central Coast Ambient Monitoring Program (CCAMP) QA/QC.

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### Region 3

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**Water Segment:** Tequisquita Slough

**Pollutant:** Fecal Coliform

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. Ten of the 16 samples were in exceedance of the water quality objective. This site is located adjacent to a bridge which hosts 100+ cliff swallow nests and there is rarely flow observed (site appears to have standing water).

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of 16 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:**

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***Numeric Line of Evidence*** Pollutant-Water

***Beneficial Use:*** R1 - Water Contact Recreation

***Matrix:*** Water

***Water Quality Objective/  
Water Quality Criterion:*** Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.

*Data Used to Assess Water Quality:* Ten of 16 samples exceeded the water quality objective (CCAMP, 2004). This site is located adjacent to a bridge which hosts 100+ cliff swallow nests and there is rarely flow observed (site appears to have standing water).

*Spatial Representation:* One sampling station.

*Temporal Representation:* Monthly sampling events.

*Data Quality Assessment:* Central Coast Ambient Monitoring Program (CCAMP) QA/QC.

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Fact Sheets Supporting  
“Do Not Delist” Recommendations



September 2005





## Region 4

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**Water Segment:** Ashland Avenue Drain

**Pollutant:** Coliform Bacteria

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

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## Region 4

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**Water Segment:** Avalon Beach

**Pollutant:** Bacteria Indicators

**Decision:** Do Not Delist

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

Five lines of evidence are available in the administrative record from three sampling stations to assess this pollutant. A large number of samples exceed the bacteriological standards for waters adjacent to public beaches and public water-contact sports areas.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of not removing this water segment-pollutant combination 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. Sixty-five out of 215 samples exceeded the bacteriological standards for waters adjacent to public beaches and public water-contact sports areas and this exceeds the allowable frequency of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

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

**Lines of Evidence:**

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***Numeric Line of Evidence***

Pollutant-Water

***Beneficial Use:***

R1 - Water Contact Recreation

***Matrix:***

Water

***Water Quality Objective/  
Water Quality Criterion:***

17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports areas shall be as follows:

(1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed:

(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or

(B) 10,000 total coliform bacteria per 100 milliliters; or

(C) 400 fecal coliform bacteria per 100 milliliters; or

(D) 104 enterococcus bacteria per 100 milliliters.

*Data Used to Assess Water Quality:* Forty-two samples, 7 exceeding (SWRCB, 2003).

*Spatial Representation:* Data collected between BB restaurant and Tuna Club. 1 station: DHS (120) which is the same as DHS (126)99. This station represents the beach 50 yards on either side of the sampling point.

*Temporal Representation:* Data collected in 1999, 2000, and 2001.

*Data Quality Assessment:* County Health Department.

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***Numeric Line of Evidence*** Pollutant-Water

*Beneficial Use:* R1 - Water Contact Recreation

*Matrix:* Water

*Water Quality Objective/  
Water Quality Criterion:* 17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports areas shall be as follows:  
(1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed:  
(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or  
(B) 10,000 total coliform bacteria per 100 milliliters; or  
(C) 400 fecal coliform bacteria per 100 milliliters; or  
(D) 104 enterococcus bacteria per 100 milliliters.

*Data Used to Assess Water Quality:* Forty-three samples, 14 exceeding (SWRCB, 2003).

*Spatial Representation:* Data collected between Pier and BB restaurant (1/3). 1 station: DHS118. This station represents the beach 50 yards on either side of the sampling point.

*Temporal Representation:* Data collected in 1999, 2000, and 2001.

*Data Quality Assessment:* County Health Department.

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***Numeric Line of Evidence*** Pollutant-Water

*Beneficial Use:* R1 - Water Contact Recreation

*Matrix:* Water

*Water Quality Objective/  
Water Quality Criterion:* 17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports areas shall be as follows:  
(1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed:  
(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or  
(B) 10,000 total coliform bacteria per 100 milliliters; or  
(C) 400 fecal coliform bacteria per 100 milliliters; or  
(D) 104 enterococcus bacteria per 100 milliliters.

*Data Used to Assess Water Quality:* Forty-three samples, 10 exceeding (SWRCB, 2003).

*Spatial Representation:* Data collected between Pier and BB restaurant (2/3). 1 station: DHS(119). this station represents the beach 50 yards on either side of the sampling point.

*Temporal Representation:* Data collected in 1999, 2000, and 2001.

*Data Quality Assessment:* County health Department.

***Numeric Line of Evidence*** Pollutant-Water

*Beneficial Use:* R1 - Water Contact Recreation

*Matrix:* Water

*Water Quality Objective/ Water Quality Criterion:* 17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports areas shall be as follows:  
 (1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed:  
 (A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or  
 (B) 10,000 total coliform bacteria per 100 milliliters; or  
 (C) 400 fecal coliform bacteria per 100 milliliters; or  
 (D) 104 enterococcus bacteria per 100 milliliters.

*Data Used to Assess Water Quality:* Seventeen samples exceeding standards out of 44 samples (SWRCB, 2003).

*Spatial Representation:* Data collected between storm drain and Pier (1/3). 1 station. This station represents the beach 50 yards on either side of the sampling point.

*Temporal Representation:* Data collected in 1999, 2000, and 2001.

*Data Quality Assessment:* County Health Department.

***Numeric Line of Evidence*** Pollutant-Water

*Beneficial Use:* R1 - Water Contact Recreation

*Matrix:* Water

*Water Quality Objective/ Water Quality Criterion:* 17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports areas shall be as follows:  
 (1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed:  
 (A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or  
 (B) 10,000 total coliform bacteria per 100 milliliters; or  
 (C) 400 fecal coliform bacteria per 100 milliliters; or  
 (D) 104 enterococcus bacteria per 100 milliliters.

*Data Used to Assess Water Quality:* Forty-three samples, 17 samples exceeding (SWRCB, 2003).

*Spatial Representation:* Data collected between storm drain and Pier (2/3). 1 station: DHS(116). This station represents the beach 50 yards on either side of the sampling point.

*Temporal Representation:* Data collected in 1999, 2000, and 2001.

*Data Quality Assessment:* County health Department.

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## Region 4

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**Water Segment:** Ballona Creek

**Pollutant:** Copper

**Decision:** Do Not 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. Four lines of evidence are available in the record to access this pollutant. The total number of sample exceedances from the combined four dissolved copper lines of evidence when compared with CTR dissolved copper criteria exceed the frequency allowed by the Listing Policy.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 30 of 138 samples exceeded the dissolved copper CTR-CCC guidelines for copper and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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*Numeric Line of Evidence*

Pollutant-Water

*Beneficial Use:*

WA - Warm Freshwater Habitat

*Matrix:*

Water

*Water Quality Objective/  
Water Quality Criterion:*

CTR Copper Criterion for continuous concentration in water for the protection of aquatic life is expressed as a function of the total hardness of the water body. At a total hardness of 100 mg/l the continuous concentration for Copper is 9.0 ug/l. The aquatic life criteria will vary depending of total hardness reported. The criterion is linked and applicable for the protection of aquatic life Beneficial Uses.

*Data Used to Assess Water Quality:*

Numeric data generated from 22 samples taken from 10/12/00 to 4/30/03 at one to two-week sampling interval. Six (6) samples exceeded the Copper Continuous Criterion Concentration, which equals the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4days) without deleterious effects (LACDPW, 2003-2003).

<i>Spatial Representation:</i>	One sample site sampled during the dry and wet season beginning from 10/12/00 through 4/30/03 at approximately one to two week intervals.
<i>Temporal Representation:</i>	Twenty-two (22) samples were taken during the wet and dry season from 10/12/00 to 4/30/03 at approximately one to two week intervals as part of the Los Angeles County Storm water monitoring program prepared by the Los Angeles County Department of Public Works.
<i>Environmental Conditions:</i>	The Ballona Creek monitoring station is located at the existing stream gage station (Stream Gage No. F38C-R) between Sawtelle Boulevard and Sepulveda Boulevard in the City of Los Angeles. At this location, which was chosen to avoid tidal influences, the upstream tributary watershed of Ballona Creek is 88.8 square miles. The entire Ballona Creek Watershed is 127.1 square miles. At the gauging station, Ballona Creek is a concrete lined trapezoidal channel.
<i>Data Quality Assessment:</i>	Evaluation of Analytes and QA/QC Specifications for Monitoring Program (Woodward-Clyde, 1996) Los Angeles County Department of Public Works.

<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<i>Beneficial Use:</i>	WA - Warm Freshwater Habitat
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	California Toxics Rule. Acute criterion.
<i>Data Used to Assess Water Quality:</i>	Thirty-eight water samples, 17 samples exceeding acute criterion (LACDPW, 2003-2003).
<i>Spatial Representation:</i>	Samples were collected spatially along creek.
<i>Temporal Representation:</i>	Fall, spring, winter, summer in different years.
<i>Environmental Conditions:</i>	Data 1-5 years old, data measured in water body, environmental conditions (winter, spring in different years).
<i>Data Quality Assessment:</i>	Los Angeles County Department of Public Works.

<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<i>Beneficial Use:</i>	WA - Warm Freshwater Habitat
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	CTR Copper Criterion for continuous concentration in water for the protection of aquatic life is expressed as a function of the total hardness of the water body. At a total hardness of 100 mg/l the continuous concentration for Copper is 9.0 ug/l. The aquatic life criteria will vary depending of total hardness reported. The criterion is linked and applicable for the protection of aquatic life Beneficial Uses.
<i>Data Used to Assess Water Quality:</i>	None of 30 samples exceeded the CTR criterion. Detection limit was 10 ug/L (SCCWRP, 2004).
<i>Spatial Representation:</i>	The metals data from SCCWRP were from a characterization study of Ballona Creek and Estuary to identify relative metals contributions of runoff discharges during dry conditions. Twelve in-stream sites, including nine from Ballona Creek and three of the in-stream sites in the estuary. One of the storm drains was

Sepulveda Canyon Channel and this data was used to assess conditions for that listed reach.

*Temporal Representation:* Sampling was conducted on May 17, July 16, and September 24, 2003.

*Environmental Conditions:* These samples represent dry-weather conditions.

*Data Quality Assessment:* Southern California Coastal Water Research Project.

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***Numeric Line of Evidence*** Pollutant-Water

*Beneficial Use:* WA - Warm Freshwater Habitat

*Matrix:* Water

*Water Quality Objective/  
Water Quality Criterion:* CTR Criterion

*Data Used to Assess Water  
Quality:* Seven of 48 samples exceeded the CTR criterion. The detection limit is 10 ug/L (LACDPW, 2003-2003).

*Spatial Representation:* The metals data from the City of Los Angeles were from four locations along Ballona Creek at National Boulevard, Overland Avenue, Centinela Boulevard, and Pacific Avenue. The data from National and Overland Boulevards are representative of Ballona Creek Reaches 1 and 2, respectively.

*Temporal Representation:* Sampled on a monthly basis between January 2002 through May 2003.

*Environmental Conditions:* Samples are representative of dry-weather conditions. A hardness value of 300 mg/L was used to calculate the water quality criterion.

*Data Quality Assessment:* City of Los Angeles.

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## Region 4

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**Water Segment:** Ballona Creek Estuary

**Pollutant:** Chlordane

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under sections 4.5 and 4.6 of the Listing Policy. Under section 4.5 a single line of evidence is necessary to assess delisting status while under section 4.6, a minimum of two lines of evidence are needed to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.5, the site shows that this pollutant probably has not accumulated in fish and shellfish to levels that are of concern. The assessments are over 10 years old and may not be representative of current conditions and a newer tissue guideline was used. The sediments in this water have been found to be toxic and concentrations of the pollutant in the water body in vicinity of the water body exceed the sediment guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category for bioaccumulation but the water should be removed from the list for sediment-related impacts.

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Eighteen of 20 samples exceeded the sediment guideline and 4 of 4 samples exhibit toxicity. A minimum of 212 samples would be needed in order for 18 exceedances to result in a delisting.
5. None of 4 measurements exceed the applicable tissue guideline.
6. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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*Numeric Line of Evidence* Toxicity

*Beneficial Use:* MA - Marine Habitat

*Matrix:* -N/A

<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
<i>Evaluation Guideline:</i>	Significant toxicity as compared to control.
<i>Data Used to Assess Water Quality:</i>	Four samples with 4 measurements of significant amphipod toxicity (Anderson et al., 1998).
<i>Spatial Representation:</i>	One station at the mouth of the estuary (BPTCP 44024.0).
<i>Temporal Representation:</i>	Samples collected January 1993 and February 1994.
<i>Data Quality Assessment:</i>	Bay Protection and Toxic Cleanup Program.

<b><i>Numeric Line of Evidence</i></b>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.
<i>Evaluation Guideline:</i>	OEHHA Screening Value: 30 ug/kg (Brodberg and Pollock, 1999).
<i>Data Used to Assess Water Quality:</i>	Four samples with no measurements exceeding the screening value (SWAMP, 2004).
<i>Spatial Representation:</i>	One station.
<i>Temporal Representation:</i>	State Mussel Watch Data: Composite mussel sample of three individuals collected in 1985, 1986, and 1988. Toxic Substances Monitoring Program: One fish sample collected in 1993.
<i>Data Quality Assessment:</i>	State Mussel Watch and Toxic Substances Monitoring Program. Data that are older than ten years are not used by OEHHA in developing health assessments because data do not represent current conditions (Brodberg, personal communication).

<b><i>Numeric Line of Evidence</i></b>	Pollutant-Sediment
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use.
<i>Evaluation Guideline:</i>	An Effects Range-Median value of 6 ug/g was used (Long and Morgan, 1990).
<i>Data Used to Assess Water Quality:</i>	Twenty samples with 18 exceeding the sediment quality guideline (Anderson, et al, 1998).
<i>Spatial Representation:</i>	The sediment listings were based primarily on data collected as part of the BPTCP, which collected samples from a single station (Station 44024.0) at the mouth of the estuary. The CSTF database also contains sediment data from two

studies in the bay near the mouth of the Ballona Creek Estuary. In one study, the US Army Corps of Engineers (USACE) analyzed chemical concentrations in sediments at six stations. The other study performed by the LACDPW provides information on long-term trends in sediment contaminant concentrations at two locations.

*Temporal Representation:* BPTCP: January 1993 and February 1994.  
USACE: in March 1998.  
LACDPW: 1990 -1999.

*Data Quality Assessment:* Description of QA information in the Contaminated Sediments Task Force Database.

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## Region 4

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**Water Segment:** Ballona Creek Estuary

**Pollutant:** DDT

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for delisting under sections 4.5 and 4.6 of the Listing Policy. Under section 4.5 a single line of evidence is necessary to assess listing status while under section 4.6, a minimum of two lines of evidence are needed to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant sediment toxicity but it is unknown if the pollutant is likely to cause or contribute to any toxic effect because there is no guideline to interpret the data. In addition, there is one exceedance for the pollutant in tissue.

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

This conclusion is based on the staff findings that:

1. No sediment quality guideline is available that complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. One of 4 samples exceeded the tissue guideline and this is not enough information to consider removal of the pollutant from the list using the Policy's delisting factors.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff  
Recommendation:**

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because, applicable water quality standards are exceeded for tissue measurements and a pollutant contributes to or causes the problem. The sediment listing for this pollutant, however, should be removed.

**Lines of Evidence:**

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***Numeric Line of Evidence***

Pollutant-Tissue

***Beneficial Use:***

CM - Commercial and Sport Fishing (CA), MA - Marine Habitat

***Matrix:***

Tissue

***Water Quality Objective/  
Water Quality Criterion:***

Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.

<i>Evaluation Guideline:</i>	OEHHA Screening Value: 100 ug/kg (Brodberg and Pollock, 1999).
<i>Data Used to Assess Water Quality:</i>	Four samples with 1 measurement exceeding the screening value (TSMP, 2002).
<i>Spatial Representation:</i>	One station.
<i>Temporal Representation:</i>	State Mussel Watch Data: Composite mussel sample of three individuals collected in 1985, 1986, and 1988. Toxic Substances Monitoring Program: One fish sample collected in 1993.
<i>Data Quality Assessment:</i>	State Mussel Watch and Toxic Substances Monitoring Program. Data that are older than ten years are not used by OEHHA in developing health assessments because data do not represent current conditions (Brodberg, personal communication).

<b><i>Numeric Line of Evidence</i></b>	Pollutant-Sediment
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use.
<i>Evaluation Guideline:</i>	No sediment quality guideline is available that satisfies the conditions of section 6.1.3 of the Listing Policy.
<i>Data Used to Assess Water Quality:</i>	Twenty-eight samples are available (Anderson et al., 1998).
<i>Spatial Representation:</i>	Eight stations.
<i>Temporal Representation:</i>	The sediment listings were based primarily on data collected as part of the BPTCP, which collected samples from a single station (Station 44024.0) at the mouth of the estuary. The CSTF database also contains sediment data from two studies in the bay near the mouth of the Ballona Creek Estuary. In one study, the US Army Corps of Engineers (USACE) analyzed chemical concentrations in sediments at six stations. The other study performed by the LACDPW provides information on long-term trends in sediment contaminant concentrations at two locations.
<i>Environmental Conditions:</i>	BPTCP: January 1993 and February 1994. USACE: in March 1998. LACDPW: 1990 -1999.
<i>Data Quality Assessment:</i>	Description of QA information in the Contaminated Sediments Task Force Database.

<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	MA - Marine Habitat
<i>Matrix:</i>	-N/A
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological

	responses in human, plant, animal, or aquatic life.
<i>Evaluation Guideline:</i>	Significant toxicity as compared to control.
<i>Data Used to Assess Water Quality:</i>	Four samples with 4 measurements of significant amphipod toxicity (Anderson et al., 1998).
<i>Spatial Representation:</i>	One station at the mouth of the estuary (BPTCP 44024.0).
<i>Temporal Representation:</i>	Samples collected January 1993 and February 1994.
<i>Data Quality Assessment:</i>	Bay Protection and Toxic Cleanup Program.

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## Region 4

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**Water Segment:** Ballona Creek Estuary

**Pollutant:** Lead

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under sections 4.6 of the Listing Policy. Under section 4.6, a minimum of two lines of evidence are needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The sediments in this water segment have been found to be toxic and concentrations of the pollutant in the water body exceed the guidelines.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Twelve of 28 samples exceeded the sediment guideline, and 4 of 4 samples exhibit toxicity. The allowable frequency for this pollutant exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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<i>Numeric Line of Evidence</i>	Pollutant-Sediment
<i>Beneficial Use:</i>	MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use.
<i>Evaluation Guideline:</i>	A Probable Effects Level of 112.18 ug/g was used (MacDonald et al., 1996).
<i>Data Used to Assess Water Quality:</i>	Twenty eight samples with 12 exceeding the sediment quality guideline (Anderson et al., 1998).
<i>Spatial Representation:</i>	The sediment listings were based primarily on data collected as part of the BPTCP, which collected samples from a single station (Station 44024.0) at the

mouth of the estuary. The CSTF database also contains sediment data from two studies in the bay near the mouth of the Ballona Creek Estuary. In one study, the US Army Corps of Engineers (USACE) analyzed chemical concentrations in sediments at six stations. The other study performed by the LACDPW provides information on long-term trends in sediment contaminant concentrations at two locations.

*Temporal Representation:* BPTCP: January 1993 and February 1994.  
USACE: in March 1998.  
LACDPW: 1990 -1999.

*Data Quality Assessment:* Description of QA information in the Contaminated Sediments Task Force Database.

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***Numeric Line of Evidence*** Toxicity

*Beneficial Use:* MA - Marine Habitat

*Matrix:* -N/A

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

*Evaluation Guideline:* Significant toxicity as compared to control.

*Data Used to Assess Water  
Quality:* Four samples with 4 measurements of significant amphipod toxicity (Anderson et al., 1998).

*Spatial Representation:* One station at the mouth of the estuary (BPTCP 44024.0).

*Temporal Representation:* Samples collected January 1993 and February 1994.

*Data Quality Assessment:* Bay Protection and Toxic Cleanup Program.

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## Region 4

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**Water Segment:** Ballona Creek Estuary

**Pollutant:** PCBs (dioxin-like)

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under sections 4.5 and 4.6 of the Listing Policy. Under section 4.5 a single line of evidence is necessary to assess delisting status while under section 4.6, a minimum of two lines of evidence are needed to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.5, the site shows that this pollutant has accumulated in fish and shellfish to levels that are of concern. The sediments in this water have been found to be toxic but concentrations of the pollutant in the water body in vicinity of the sediment do not exceed sediment guidelines.

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

This conclusion is based on the staff findings that:

1. The tissue and sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Four of 4 measurements exceed the applicable tissue guideline. Four of 4 samples exhibit toxicity and 1 of 28 samples exceeded the sediment guideline. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because although sediment guidelines are not exceeded, there is still evidence of sediment toxicity and pollutant accumulation in tissue in this water body.

### Lines of Evidence:

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*Numeric Line of Evidence* Toxicity

*Beneficial Use:* MA - Marine Habitat

*Matrix:* -N/A

*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological

	responses in human, plant, animal, or aquatic life.
<i>Evaluation Guideline:</i>	Significant toxicity as compared to control.
<i>Data Used to Assess Water Quality:</i>	Four samples with 4 measurements of significant amphipod toxicity (Anderson et al., 1998).
<i>Spatial Representation:</i>	One station at the mouth of the estuary (BPTCP 44024.0).
<i>Temporal Representation:</i>	Samples collected January 1993 and February 1994.
<i>Data Quality Assessment:</i>	Bay Protection and Toxic Cleanup Program.

<b><i>Numeric Line of Evidence</i></b>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.
<i>Evaluation Guideline:</i>	OEHHA Screening Value: 20 ug/kg (Brodberg and Pollock, 1999).
<i>Data Used to Assess Water Quality:</i>	Four samples with 4 measurements exceeding the screening value (TSMP, 2002).
<i>Spatial Representation:</i>	One station.
<i>Temporal Representation:</i>	State Mussel Watch Data: Composite mussel sample of three individuals collected in 1985, 1986, and 1988. Toxic Substances Monitoring Program: One fish sample collected in 1993.
<i>Data Quality Assessment:</i>	State Mussel Watch and Toxic Substances Monitoring Program. Data that are older than ten years are not used by OEHHA in developing health assessments because data do not represent current conditions (Brodberg, personal communication).

<b><i>Numeric Line of Evidence</i></b>	Pollutant-Sediment
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use.
<i>Evaluation Guideline:</i>	A sediment quality guideline of 400 ng/g was used to evaluate the data (McDonald et al., 2000).
<i>Data Used to Assess Water Quality:</i>	Twenty-eight samples with 1 exceeding the sediment quality guideline (Anderson et al., 1998).
<i>Spatial Representation:</i>	Eight stations.
<i>Temporal Representation:</i>	The sediment listings were based primarily on data collected as part of the BPTCP, which collected samples from a single station (Station 44024.0) at the

mouth of the estuary. The CSTF database also contains sediment data from two studies in the bay near the mouth of the Ballona Creek Estuary. In one study, the US Army Corps of Engineers (USACE) analyzed chemical concentrations in sediments at six stations. The other study performed by the LACDPW provides information on long-term trends in sediment contaminant concentrations at two locations.

*Environmental Conditions:* BPTCP: January 1993 and February 1994.  
USACE: in March 1998.  
LACDPW: 1990 -1999.

*Data Quality Assessment:* Description of QA information in the Contaminated Sediments Task Force Database.

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## Region 4

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**Water Segment:** Ballona Creek Estuary

**Pollutant:** Zinc

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under sections 4.6 of the Listing Policy. Under section 4.6 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. Based on section 4.6, the site has significant sediment toxicity and the pollutant concentration still exceeds the sediment guideline.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Three of 28 samples exceeded the sediment guideline, 4 of 4 samples exhibit toxicity, and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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*Numeric Line of Evidence* Pollutant-Sediment

*Beneficial Use:* MA - Marine Habitat

*Matrix:* -N/A

*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use.

*Evaluation Guideline:* An Effects Range-Median of 410 ug/g was used (Long et al., 1995).

*Data Used to Assess Water Quality:* Twenty-eight samples with 3 measurements exceeding the sediment quality guideline (Anderson et al., 1998).

*Spatial Representation:* The sediment listings were based primarily on data collected as part of the BPTCP, which collected samples from a single station (Station 44024.0) at the mouth of the estuary. The CSTF database also contains sediment data from two studies in the bay near the mouth of the Ballona Creek Estuary. In one study, the US Army Corps of Engineers (USACE) analyzed chemical concentrations in sediments at six stations. The other study performed by the LACDPW provides information on long-term trends in sediment contaminant concentrations at two locations.

*Temporal Representation:* BPTCP: January 1993 and February 1994.  
USACE: in March 1998.  
LACDPW: 1990 -1999.

*Data Quality Assessment:* Description of QA information in the Contaminated Sediments Task Force Database.

***Numeric Line of Evidence*** Toxicity

*Beneficial Use:* MA - Marine Habitat

*Matrix:* -N/A

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

*Evaluation Guideline:* Significant toxicity as compared to control.

*Data Used to Assess Water Quality:* Four samples with 4 measurements of significant amphipod toxicity (Anderson et al., 1998).

*Spatial Representation:* One station at the mouth of the estuary (BPTCP 44024.0).

*Temporal Representation:* Samples collected January 1993 and February 1994.

*Data Quality Assessment:* Bay Protection and Toxic Cleanup Program.

## Region 4

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**Water Segment:** Big Rock Beach

**Pollutant:** Coliform Bacteria

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity (section 2 of the Listing Policy).

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

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## Region 4

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**Water Segment:** Brown Barranca/Long Canyon

**Pollutant:** Nitrate and Nitrite

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* MU - Municipal & Domestic

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Clara Rive Nitrogen TMDL was approved by RWQCB on August 7, 2003 and subsequently approved by USEPA on March 18, 2004.

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## Region 4

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**Water Segment:** Cabrillo Beach (Outer)

**Pollutant:** Coliform Bacteria

**Decision:** Do Not Delist

**Weight of Evidence:** Two lines of evidence are available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity (section 2 of the Listing Policy).

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

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## Region 4

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**Water Segment:** Calleguas Creek Reach 1 (was Mugu Lagoon on 1998 303(d) list)

**Pollutant:** DDT

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from 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 insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 4 samples exceeded the OEHHA Screening Value but the number of samples is insufficient to determine with the confidence and power required by 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.
<i>Evaluation Guideline:</i>	100 ng/g (OEHHA Screening Value).
<i>Data Used to Assess Water Quality:</i>	Two out of 4 samples exceeded. Representation: A total of 4 filet composite samples of gray smoothhound shark were collected. Shark were collected in 1992-94 and 1997. The guideline was exceeded in samples collected in 1992 and 1993 (TSMP, 2002).
<i>Spatial Representation:</i>	One station located at Laguna Road Bridge.
<i>Temporal Representation:</i>	Samples were collected annually 1992-94, 1997.

*Data Quality Assessment:*

Toxic Substances Monitoring Program 1992-93 and 1994-95 Data Reports.  
Environmental Chemistry Quality Assurance and Data Report for the Toxic  
Substances Monitoring Program, 1996-2000. Department of Fish and Game

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## Region 4

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<b>Water Segment:</b>	Calleguas Creek Reach 1 (was Mugu Lagoon on 1998 303(d) list)
<b>Pollutant:</b>	Mercury
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for removal from 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.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>3. Two of the 4 samples exceeded the OEHHA Screening Value but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.</li><li>4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Tissue
<b><i>Beneficial Use:</i></b>	CM - Commercial and Sport Fishing (CA)
<b><i>Matrix:</i></b>	Tissue
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.
<b><i>Evaluation Guideline:</i></b>	0.3 ug/g (OEHHA Screening Value)
<b><i>Data Used to Assess Water Quality:</i></b>	Two out of 4 samples exceeded. A total of 4 filet composite samples of gray smoothhound shark were collected. Shark were collected in 1992-94 and 1997. The guideline was exceeded in samples collected 1992-94. The 1997 sample did not exceed the guideline (TSMP, 2002).
<b><i>Spatial Representation:</i></b>	One station located at Laguna Road Bridge.
<b><i>Temporal Representation:</i></b>	Samples were collected annually 1992-94, 1997.

*Data Quality Assessment:*

Toxic Substances Monitoring Program 1992-93 and 1994-95 Data Reports.  
Environmental Chemistry Quality Assurance and Data Report for the Toxic  
Substances Monitoring Program, 1996-2000. Department of Fish and Game

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## Region 4

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**Water Segment:** Calleguas Creek Reach 1 (was Mugu Lagoon on 1998 303(d) list)

**Pollutant:** Nitrogen

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

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

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

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* ES - Estuarine Habitat

*Information Used to Assess Water Quality:* A TMDL for this water segment-pollutant combination was approved by the RWQCB in October 2002. The TMDL has an approved implementation plan. USEPA approved the TMDL on June 20, 2003.

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## Region 4

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**Water Segment:** Calleguas Creek Reach 2 (estuary to Potrero Rd- was Calleguas Creek Reaches 1 and 2 on 1998 303d list)

**Pollutant:** Ammonia

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

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

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

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* ES - Estuarine Habitat

*Information Used to Assess Water Quality:* A TMDL for this water segment-pollutant combination was approved by the RWQCB in October 2002. The TMDL has an approved implementation plan. USEPA approved the TMDL on June 20, 2003.

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## Region 4

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**Water Segment:** Calleguas Creek Reach 2 (estuary to Potrero Rd- was Calleguas Creek Reaches 1 and 2 on 1998 303d list)

**Pollutant:** Copper

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess delisting status. One line of evidence is available in the administrative record to assess this pollutant. Seven samples exceed the CTR dissolved copper continuous concentration in water for the protection of aquatic life.

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

This conclusion is based on the staff findings that:

1. It is unknown whether the data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of 11 samples exceeded the CTR dissolved copper continuous concentration in water for the protection of aquatic life but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

**Lines of Evidence:**

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	WA - Warm Freshwater Habitat
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	CTR Copper Criterion for continuous concentration in water for the protection of aquatic life is expressed as a function of the total hardness of the water body. At a total hardness of 100mg/l the continuous concentration for Copper is 9.0 ug/l.
<i>Data Used to Assess Water</i>	Eleven water samples, 7 samples exceeding for chronic standard (SWRCB,

*Quality:* 2003).

*Spatial Representation:* Three sites.

*Temporal Representation:* Summer, fall, winter of 1998 and 1999.

*Data Quality Assessment:* Calleguas Creek Characterization Study.

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## Region 4

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**Water Segment:** Calleguas Creek Reach 2 (estuary to Potrero Rd- was Calleguas Creek Reaches 1 and 2 on 1998 303d list)

**Pollutant:** DDT

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess delisting status. One line of evidence is available in the administrative record to assess this pollutant. Seven samples exceed the CTR Criteria Continuous Concentration for DDT in saltwater because this segment is influenced by tides.

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

This conclusion is based on the staff findings that:

- 1.It is unknown whether the data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2.The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3.Seven of 11 samples exceeded the CTR criteria and there is not enough samples to support delisting the water segment as specified in Table 4.1 of the Listing Policy.
- 4.Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and the pollutant contributes to or causes the problem. in addition, there are not enough total samples taken to support removal from the 303(d) list.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	WA - Warm Freshwater Habitat
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	California Toxics Rule: 0.001 ug/L.
<i>Data Used to Assess Water</i>	Eleven water samples, 7 samples exceeding (SWRCB, 2003).

*Quality:*

*Spatial Representation:* Three sites.

*Temporal Representation:* Summer, fall, winter, spring in 1998 and 1999.

*Data Quality Assessment:* Calleguas Creek Characterization Study

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## Region 4

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**Water Segment:** Calleguas Creek Reach 2 (estuary to Potrero Rd- was Calleguas Creek Reaches 1 and 2 on 1998 303d list)

**Pollutant:** Fecal Coliform

**Decision:** Do Not 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. 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 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 quantity requirements of section 6.1.5 of the Policy.
2. Twenty-four of 34 samples exceeded the Fecal Coliform water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
3. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	R1 - Water Contact Recreation
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: In waters designated for water contact recreation (REC-1), the fecal coliform concentration shall not exceed a log mean of 200/100 ml (based on a minimum of not less than four samples for any 30-day period), nor shall more than 10 percent of total samples during any 30-day period exceed 400/100 ml.
<i>Data Used to Assess Water Quality:</i>	Thirty-four bacteria samples, Geomean of 934 exceeds standard, 24 samples exceeding at 400/100ml standard (SWRCB, 2003).
<i>Spatial Representation:</i>	Three sites.

*Temporal Representation:* Summer, fall, winter, spring.

*Data Quality Assessment:* Calleguas Creek Characterization Study.

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## Region 4

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**Water Segment:** Calleguas Creek Reach 2 (estuary to Potrero Rd- was Calleguas Creek Reaches 1 and 2 on 1998 303d list)

**Pollutant:** Nitrogen

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

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

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

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* MU - Municipal & Domestic

*Information Used to Assess Water Quality:* A TMDL for this water segment-pollutant combination was approved by the RWQCB in October 2002. The TMDL has an approved implementation plan. USEPA approved the TMDL on June 20, 2003.

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## Region 4

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<b>Water Segment:</b>	Calleguas Creek Reach 3 (Potrero Road upstream to confluence with Conejo Creek on 1998 303d list)
<b>Pollutant:</b>	Nitrate and Nitrite
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.</p> <p>After review of the available data and information for this recommendation, SWRCB staff concludes that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.</p>
<b>SWRCB Staff Recommendation:</b>	<p>After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.</p>
<b>Lines of Evidence:</b>	

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<i>Line of Evidence</i>	Remedial Program in Place
<i>Beneficial Use</i>	MU - Municipal & Domestic
<i>Information Used to Assess Water Quality:</i>	A TMDL for this water segment-pollutant combination was approved by the RWQCB in October 2002. The TMDL has an approved implementation plan. USEPA approved the TMDL on June 20, 2003.

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## Region 4

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**Water Segment:** Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on 1998 303d list)

**Pollutant:** Chlordane

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from 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 insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 3 samples exceeded the OEHHA Screening Value but the number of samples is insufficient to determine with the confidence and power required by 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.
<i>Evaluation Guideline:</i>	100 ng/g NAS Guideline (whole fish)
<i>Data Used to Assess Water Quality:</i>	Three out of 3 samples exceeded. A total of 3 whole fish composite samples of fathead minnows were collected in 1993-94 and 1997. The guideline was exceeded in all samples (TSMP, 2002).
<i>Spatial Representation:</i>	One station located below concrete apron just downstream of Woods Road.
<i>Temporal Representation:</i>	Samples were collected annually 1993-94 and 1997.

*Data Quality Assessment:*

Toxic Substances Monitoring Program 1992-93 and 1994-95 Data Reports.  
Environmental Chemistry Quality Assurance and Data Report for the Toxic  
Substances Monitoring Program, 1996-2000. Department of Fish and Game

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## Region 4

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**Water Segment:** Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on 1998 303d list)

**Pollutant:** DDT

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from 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 insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 3 samples exceeded the OEHHA Screening Value but the number of samples is insufficient to determine with the confidence and power required by 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.
<i>Evaluation Guideline:</i>	1000 ng/g NAS Guideline (whole fish)
<i>Data Used to Assess Water Quality:</i>	Three out of 3 samples exceeded (note: Fillet sample of goldfish exceeded OEHHA screening value in 1992). A total of 3 whole fish composite samples of flathead minnow were collected. Flathead minnow samples were collected in 1993-94 and 1997. The guideline was exceeded in all samples (TSMP, 2002).
<i>Spatial Representation:</i>	One station located below concrete apron just downstream of Woods Road.
<i>Temporal Representation:</i>	Samples were collected annually from 1993-94 and 1997.

*Data Quality Assessment:*

Toxic Substances Monitoring Program 1992-93 and 1994-95 Data Reports.  
Environmental Chemistry Quality Assurance and Data Report for the Toxic  
Substances Monitoring Program, 1996-2000. Department of Fish and Game

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## Region 4

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<b>Water Segment:</b>	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on 1998 303d list)
<b>Pollutant:</b>	Fecal Coliform
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>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. Six samples exceed the Fecal coliform water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1.It is unknown whether the data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>2.The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>3.Six of 12 samples exceeded the Fecal Coliform water quality objective but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.</li><li>4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.
<b>Lines of Evidence:</b>	

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<b><i>Beneficial Use:</i></b>	R1 - Water Contact Recreation
<b><i>Matrix:</i></b>	Water
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	Basin Plan: In waters designated for water contact recreation (REC-1), the fecal coliform concentration shall not exceed a log mean of 200/100 ml (based on a minimum of not less than four samples for any 30-day period), nor shall more than 10 percent of total samples during any 30-day period exceed 400/100 ml.
<b><i>Data Used to Assess Water</i></b>	Twelve bacteria samples, 6 exceeding 400/100 ml standard (SWRCB, 2003).

*Quality:*

*Spatial Representation:* One site.

*Temporal Representation:* Summer, fall, winter, spring.

*Data Quality Assessment:* Calleguas Creek Characterization Study

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## Region 4

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<b>Water Segment:</b>	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on 1998 303d list)
<b>Pollutant:</b>	Nitrate as Nitrate (NO3)
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess delisting status. One line of evidence is available in the administrative record to assess this pollutant. A large number of samples exceed the water quality objective. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to address the nitrogen related impacts in this water body. The Nitrate as Nitrate listing should be placed on the water quality limited segments being addressed category of the section 303(d) list.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for removing this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1.The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>2.The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>3.Thirty-eight of 43 samples exceeded the Nitrate as Nitrate water quality objective. This exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.</li><li>4.Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and an approved TMDL currently in place is expected to result in attainment of nitrogen standards in this water body.

### Lines of Evidence:

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<b><i>Beneficial Use:</i></b>	GW - Groundwater Recharge
<b><i>Matrix:</i></b>	Water
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	Basin Plan: Waters shall not exceed 10 mg/L nitrogen as nitrate-nitrogen plus nitrite-nitrogen (NO <sub>2</sub> -N), 45 mg/L as nitrate (NO <sub>3</sub> ), 10 mg/L as nitrate-nitrogen (NO <sub>3</sub> -N) or as otherwise designated in another part of the Basin Plan.
<b><i>Data Used to Assess Water Quality:</i></b>	Forty-three water samples, 38 exceeding (SWRCB,2003).
<b><i>Spatial Representation:</i></b>	Three sites.

*Temporal Representation:* Summer, fall, winter, spring.  
*Data Quality Assessment:* Calleguas Creek Characterization Study

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***Line of Evidence*** Remedial Program in Place  
*Beneficial Use* MU - Municipal & Domestic  
*Information Used to Assess Water Quality:* A TMDL for this water segment-pollutant combination was approved by the RWQCB in October 2002. The TMDL has an approved implementation plan. USEPA approved the TMDL on June 20, 2003.

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## Region 4

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<b>Water Segment:</b>	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on 1998 303d list)
<b>Pollutant:</b>	Nitrogen
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Based on the applicable factor, TMDLs have been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The excess algal growth information is backed by nutrient exceedances nitrate data. Excess algal growth should not be placed on the section 303(d) list because this reflects a condition caused by a pollutant or pollutants.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.</p>
<b>SWRCB Staff Recommendation:</b>	<p>After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved. Furthermore, the qualitative line of evidence on excess algal growth merely reflects conditions caused by documented nutrient pollutants and therefore should be removed from the 303(d) list. Nutrient TMDLs development and implementation should result in attainment of standards and the subsequent elimination of excess algal growth conditions.</p>

### Lines of Evidence:

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<b><i>Beneficial Use:</i></b>	GW - Groundwater Recharge
<b><i>Matrix:</i></b>	Water
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	Basin Plan: Waters shall not exceed 10 mg/L nitrogen as nitrate-nitrogen plus nitrite-nitrogen (NO <sub>2</sub> -N), 45 mg/L as nitrate (NO <sub>3</sub> ), 10 mg/L as nitrate-nitrogen (NO <sub>3</sub> -N) or as otherwise designated in another part of the Basin Plan.
<b><i>Data Used to Assess Water Quality:</i></b>	Forty-three water samples, 38 exceeding (SWRCB,2003).
<b><i>Spatial Representation:</i></b>	Three sites.

*Temporal Representation:* Summer, fall, winter, spring.  
*Data Quality Assessment:* Calleguas Creek Characterization Study

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***Line of Evidence*** Remedial Program in Place

*Beneficial Use* GW - Groundwater Recharge

*Information Used to Assess Water Quality:* A TMDL for this water segment-pollutant combination was approved by the RWQCB in October 2002. The TMDL has an approved implementation plan. USEPA approved the TMDL on June 20, 2003.

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## Region 4

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**Water Segment:** Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on 1998 303d list)

**Pollutant:** Toxaphene

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from 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 insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 3 samples exceeded the OEHHA Screening Value but the number of samples is insufficient to determine with the confidence and power required by 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.
<i>Evaluation Guideline:</i>	100 ng/g NAS Guideline (whole fish)
<i>Data Used to Assess Water Quality:</i>	Three out of 3 samples exceeded (note: Fillet sample of goldfish exceeded OEHHA screening value in 1992). A total of 3 whole fish composite samples of fathead minnows were collected in 1993-94 and 1997. The guideline was exceeded in all samples (TSMP, 2002).
<i>Spatial Representation:</i>	One station located below concrete apron just downstream of Woods Road.
<i>Temporal Representation:</i>	Samples were collected annually 1993-94 and 1997.

*Data Quality Assessment:*

Toxic Substances Monitoring Program 1992-93 and 1994-95 Data Reports.  
Environmental Chemistry Quality Assurance and Data Report for the Toxic  
Substances Monitoring Program, 1996-2000. Department of Fish and Game

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## Region 4

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**Water Segment:** Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on 1998 303d list)

**Pollutant:** Toxaphene

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from 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 insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 3 samples exceeded the OEHHA Screening Value but the number of samples is insufficient to determine with the confidence and power required by 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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***Numeric Line of Evidence***

Pollutant-Tissue

***Beneficial Use:***

CM - Commercial and Sport Fishing (CA)

***Matrix:***

Tissue

***Water Quality Objective/  
Water Quality Criterion:***

Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.

***Evaluation Guideline:***

100 ng/g NAS Guideline (whole fish)

***Data Used to Assess Water  
Quality:***

Three out of 3 samples exceeded (note: Fillet sample of goldfish exceeded OEHHA screening value in 1992). A total of 3 whole fish composite samples of fathead minnows were collected in 1993-94 and 1997. The guideline was exceeded in all samples (TSMP, 2002).

***Spatial Representation:***

One station located below concrete apron just downstream of Woods Road.

*Temporal Representation:*

Samples were collected annually 1993-94 and 1997.

*Data Quality Assessment:*

Toxic Substances Monitoring Program 1992-93 and 1994-95 Data Reports.  
Environmental Chemistry Quality Assurance and Data Report for the Toxic  
Substances Monitoring Program, 1996-2000. Department of Fish and Game

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## Region 4

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<b>Water Segment:</b>	Calleguas Creek Reach 5 (was Beardsley Channel on 1998 303d list)
<b>Pollutant:</b>	Nitrogen
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This water quality condition is being considered for listing under Water Quality limited segment being addressed (section 2.2) of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this water body condition. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Qualitative excess algal growth information is backed by nutrient data and is sufficient to support continued placement on the section 303(d) list (Listing Policy section 4.7).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.</p>
<b>SWRCB Staff Recommendation:</b>	<p>After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.</p>
<b>Lines of Evidence:</b>	

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<i>Line of Evidence</i>	Remedial Program in Place
<i>Beneficial Use</i>	MU - Municipal & Domestic
<i>Information Used to Assess Water Quality:</i>	A TMDL for this water segment-pollutant combination was approved by the RWQCB in October 2002. The TMDL has an approved implementation plan. USEPA approved the TMDL on June 20, 2003.

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## Region 4

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**Water Segment:** Calleguas Creek Reach 6 ( was Arroyo Las Posas Reaches 1 and 2 on 1998 303d list)

**Pollutant:** Ammonia

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

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

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* MU - Municipal & Domestic

*Information Used to Assess Water Quality:* A TMDL for this water segment-pollutant combination was approved by the RWQCB in October 2002. The TMDL has an approved implementation plan. USEPA approved the TMDL on June 20, 2003.

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## Region 4

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**Water Segment:** Calleguas Creek Reach 6 ( was Arroyo Las Posas Reaches 1 and 2 on 1998 303d list)

**Pollutant:** Fecal Coliform

**Decision:** Do Not 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. Four samples exceed the Fecal Coliform water quality objective.

Based on the readily available data and information, the weight of evidence indicates 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 quantity requirements of section 6.1.5 of the Policy.
2. Four of 12 samples exceeded the fecal coliform water quality objective but there is insufficient samples taken to determine whether the water body segment can be removed from the 303(d) list in accordance with the allowable frequency listed in Table 4.2 of the Listing Policy.
3. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

**Lines of Evidence:**

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	R1 - Water Contact Recreation
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: In waters designated for water contact recreation (REC-1), the fecal coliform concentration shall not exceed a log mean of 200/100 ml (based on a minimum of not less than four samples for any 30-day period), nor shall more than 10 percent of total samples during any 30-day period exceed 400/100 ml.
<i>Data Used to Assess Water Quality:</i>	Twelve bacteria samples, 4 samples exceeding. Geomean of 557 exceeds 200/100 ml standard (SWRCB, 2003).
<i>Spatial Representation:</i>	One site.

*Temporal Representation:* Summer, fall, winter, spring.

*Data Quality Assessment:* Calleguas Creek Characterization Study

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## Region 4

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**Water Segment:** Calleguas Creek Reach 6 ( was Arroyo Las Posas Reaches 1 and 2 on 1998 303d list)

**Pollutant:** Nitrate and Nitrite

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

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

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* MU - Municipal & Domestic

*Information Used to Assess Water Quality:* A TMDL for this water segment-pollutant combination was approved by the RWQCB in October 2002. The TMDL has an approved implementation plan. USEPA approved the TMDL on June 20, 2003.

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## Region 4

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**Water Segment:** Calleguas Creek Reach 6 ( was Arroyo Las Posas Reaches 1 and 2 on 1998 303d list)

**Pollutant:** Nitrate as Nitrate (NO3)

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

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

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* MU - Municipal & Domestic

*Information Used to Assess Water Quality:* A TMDL for this water segment-pollutant combination was approved by the RWQCB in October 2002. The TMDL has an approved implementation plan. USEPA approved the TMDL on June 20, 2003.

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## Region 4

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**Water Segment:** Calleguas Creek Reach 6 ( was Arroyo Las Posas Reaches 1 and 2 on 1998 303d list)

**Pollutant:** Nitrate as Nitrate (NO3)

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess delisting status. One line of evidence is available in the administrative record to assess this pollutant. A large number of samples exceed the nitrate as nitrate water quality objective.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of 12 samples exceeded the nitrate as nitrate water quality objective and there are insufficient number of total samples to support removing the water segment from the 303(d) list in accordance with Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:**

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	GW - Groundwater Recharge
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Waters shall not exceed 10 mg/L nitrogen as nitrate-nitrogen plus nitrite-nitrogen (NO <sub>2</sub> -N), 45 mg/L as nitrate (NO <sub>3</sub> ), 10 mg/L as nitrate-nitrogen (NO <sub>3</sub> -N) or as otherwise designated in another part of the Basin Plan.
<i>Data Used to Assess Water</i>	Twelve water samples, 8 samples exceeding (SWRCB,2003).

*Quality:*

*Spatial Representation:* One site.

*Temporal Representation:* Summer, fall, winter, spring.

*Data Quality Assessment:* NPDES reports.

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## Region 4

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<b>Water Segment:</b>	Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on 1998 303d list)
<b>Pollutant:</b>	Ammonia
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.</p>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information for this recommendation, SWRCB staff concludes that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303 (d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

### Lines of Evidence:

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<i>Line of Evidence</i>	Remedial Program in Place
<i>Beneficial Use</i>	MU - Municipal & Domestic
<i>Information Used to Assess Water Quality:</i>	A TMDL for this water segment-pollutant combination was approved by the RWQCB in October 2002. The TMDL has an approved implementation plan. USEPA approved the TMDL on June 20, 2003.

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## Region 4

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**Water Segment:** Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on 1998 303d list)

**Pollutant:** Fecal Coliform

**Decision:** Do Not 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.

Based on the readily available data and information, the weight of evidence indicates 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 quantity requirements of section 6.1.5 of the Policy.
2. Seventeen of 24 samples exceeded the fecal coliform water quality objective and there is insufficient samples taken to determine whether the water body segment can be removed from the 303(d) list in accordance with the allowable frequency listed in Table 4.2 of the Listing Policy.
3. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	R1 - Water Contact Recreation
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: In waters designated for water contact recreation (REC-1), the fecal coliform concentration shall not exceed a log mean of 200/100 ml (based on a minimum of not less than four samples for any 30-day period), nor shall more than 10 percent of total samples during any 30-day period exceed 400/100 ml.
<i>Data Used to Assess Water Quality:</i>	Twenty-four bacteria samples, 17 samples exceeding. Geomean of 909 exceed 200/100 ml standard (SWRCB, 2003).
<i>Spatial Representation:</i>	Two sites.
<i>Temporal Representation:</i>	Summer, fall, winter, spring.
<i>Data Quality Assessment:</i>	Calleguas Creek Characterization Study

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## Region 4

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**Water Segment:** Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998 303d list)

**Pollutant:** Chlordane

**Decision:** Do Not 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. Two samples exceed the OEHHA screening value but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 2 samples exceeded the OEHHA screening value. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

**Lines of Evidence:**

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***Numeric Line of Evidence***

Pollutant-Tissue

***Beneficial Use:***

CM - Commercial and Sport Fishing (CA)

***Matrix:***

Tissue

***Water Quality Objective/  
Water Quality Criterion:***

Los Angeles RWQCB Basin Plan: No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.

***Evaluation Guideline:***

OEHHA Screening Value: 30 ug/kg (Brodberg and Pollock, 1999). Section 6.1.3 of the Listing Policy does not allow the use of MTRLS to evaluate fish and shellfish tissue data.

*Data Used to Assess Water Quality:* Two tissue samples, 2 samples exceeding (TSMP, 2002).

*Spatial Representation:* Sample was collected spatially.

*Temporal Representation:* One-time sample.

*Data Quality Assessment:* TSMP

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## Region 4

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**Water Segment:** Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998 303d list)

**Pollutant:** DDT

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.5 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 against removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 4 samples exceeded the NAS Guideline (whole fish). A minimum of 48 samples would be needed in order for this water body to be delisted for this pollutant with 4 exceedances.
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 not be removed from 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:

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***Numeric Line of Evidence***

Pollutant-Tissue

***Beneficial Use:***

CM - Commercial and Sport Fishing (CA)

***Matrix:***

Tissue

***Water Quality Objective/  
Water Quality Criterion:***

Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.

***Evaluation Guideline:***

1000 ng/g NAS Guideline (whole fish).

***Data Used to Assess Water  
Quality:***

Four out of 4 samples exceeded. A total of 4 whole fish composite samples of fathead minnow and mosquitofish were collected. Two fathead minnow samples were collected in 1992. Two mosquitofish samples were collected in 1998. The guideline was exceeded in all samples (TSMP, 2002).

***Spatial Representation:***

One station located at Rancho Road crossing south west of Camarillo.

*Temporal Representation:*

Samples were collected in 6/2/92 and 6/25/98.

*Data Quality Assessment:*

Toxic Substances Monitoring Program 1992-93 Data Report.

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

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## Region 4

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**Water Segment:** Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998 303d list)

**Pollutant:** Dieldrin

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.5 of the Listing Policy. Under section 4.5 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Two samples exceed the OEHHA Screening value but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 2 samples exceeded the OEHHA screening values. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

**Lines of Evidence:**

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Los Angeles RWQCB Basin Plan: No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
<i>Evaluation Guideline:</i>	OEHHA Screening Value: 2.0 ug/kg (Brodberg and Pollock, 1999). Section 6.1.3 of the Listing Policy does not allow the use of MTRLs to evaluate fish and shellfish tissue data.

*Data Used to Assess Water Quality:* Two tissue samples, 2 samples exceeding (TSMP, 2002).

*Spatial Representation:* Sample was collected spatially.

*Temporal Representation:* One-time sample.

*Data Quality Assessment:* TSMP QAPP.

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## Region 4

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<b>Water Segment:</b>	Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998 303d list)
<b>Pollutant:</b>	Fecal Coliform
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for removal from the section 303(d) list under section 4.3 of the Listing Policy. Under section 4.3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Five samples exceed the water quality objective but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>5. It is unknown whether the data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>6. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>7. Five of 12 samples exceeded the fecal coliform water quality objective. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy.</li><li>8. Pursuant to section 4.1.1 of the Listing Policy, no additional data and information are available indicating that standards are met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.
<b>Lines of Evidence:</b>	

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<b><i>Beneficial Use:</i></b>	R1 - Water Contact Recreation
<b><i>Matrix:</i></b>	Water
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	Basin Plan: In waters designated for water contact recreation (REC-1), the fecal coliform concentration shall not exceed a log mean of 200/100 ml (based on a minimum of not less than four samples for any 30-day period), nor shall more than 10 percent of total samples during any 30-day period exceed 400/100 ml.

*Data Used to Assess Water Quality:* Twelve bacteria samples, 5 samples exceeding 400/100 ml standard. Geomean of 206 exceeds 200/100 ml standard (SWRCB, 2003).

*Spatial Representation:* One site (small reach).

*Temporal Representation:* Summer, fall, winter, spring.

*Data Quality Assessment:* Calleguas Creek Characterization Study

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## Region 4

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<b>Water Segment:</b>	Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998 303d list)
<b>Pollutant:</b>	Lindane
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>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 OEHHA screening value but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>3. None of the 2 samples exceeded the OEHHA screening value. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy.</li><li>4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.
<b>Lines of Evidence:</b>	

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Tissue
<b><i>Beneficial Use:</i></b>	CM - Commercial and Sport Fishing (CA)
<b><i>Matrix:</i></b>	Tissue
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.
<b><i>Evaluation Guideline:</i></b>	OEHHA Screening Value: 30 ug/kg for Lindane (gamma-HCH) (Brodberg and Pollock, 1999). Section 6.1.3 of the Listing Policy does not allow the use of

	MTRLS to evaluate fish and shellfish tissue data.
<i>Data Used to Assess Water Quality:</i>	Two tissue samples with no samples exceeding the screening value (TSMP, 2002).
<i>Spatial Representation:</i>	Sample was collected spatially.
<i>Temporal Representation:</i>	One-time sample.
<i>Data Quality Assessment:</i>	TSMP

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## Region 4

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**Water Segment:** Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998 303d list)

**Pollutant:** Nitrate as Nitrate (NO3)

**Decision:** Do Not 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. Six samples exceed the water quality objective but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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. It is unknown whether the data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 12 samples exceeded the nitrate as nitrate (NO3) water quality objective. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

**Lines of Evidence:**

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	GW - Groundwater Recharge
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Waters shall not exceed 10 mg/L nitrogen as nitrate-nitrogen plus nitrite-nitrogen (NO2-N), 45 mg/L as nitrate (NO3), 10 mg/L as nitrate-nitrogen (NO3-N) or as otherwise designated in [another part of the Basin Plan].
<i>Data Used to Assess Water</i>	Twelve water samples, 6 samples exceeding (SWRCB, 2002).

*Quality:*

*Spatial Representation:* One site only (Conejo Creek).

*Temporal Representation:* Summer, fall, winter, spring.

*Environmental Conditions:* Data 3-4 years old, data measured at site, during all seasons.

*Data Quality Assessment:* Calleguas Creek Characterization Study

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## Region 4

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<b>Water Segment:</b>	Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998 303d list)
<b>Pollutant:</b>	Nitrogen, Nitrate
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This water quality condition is being considered for listing under Water Quality limited segment being addressed (section 2.2) of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this water body condition. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Qualitative excess algal growth information is backed by nutrient data and is sufficient to support continued placement on the section 303(d) list (Listing Policy section 3.7).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.</p>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

### Lines of Evidence:

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<i>Line of Evidence</i>	Remedial Program in Place
<i>Beneficial Use</i>	MU - Municipal & Domestic
<i>Information Used to Assess Water Quality:</i>	A TMDL for this water segment-pollutant combination was approved by the RWQCB in October 2002. The TMDL has an approved implementation plan. USEPA approved the TMDL on June 20, 2003.

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## Region 4

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**Water Segment:** Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998 303d list)

**Pollutant:** Nitrogen, Nitrite

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess delisting status. One line of evidence is available in the administrative record to assess this pollutant. 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 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. Eighteen of 110 samples exceeded the nitrite-nitrogen water quality objective and this exceeds 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 not be removed from the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	GW - Groundwater Recharge
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Waters shall not exceed 10 mg/L nitrogen as nitrate-nitrogen plus nitrite-nitrogen (NO <sub>2</sub> -N), 45 mg/L as nitrate (NO <sub>3</sub> ), 10 mg/L as nitrate-nitrogen (NO <sub>3</sub> -N) or as otherwise designated in another part of the Basin Plan.
<i>Data Used to Assess Water Quality:</i>	One-hundred and ten water samples, 18 samples exceeding (SWRCB, 2003).

*Spatial Representation:* One site only (Conejo Creek).

*Temporal Representation:* Summer, fall, winter, spring.

*Data Quality Assessment:* NPDES report.

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## Region 4

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<b>Water Segment:</b>	Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998 303d list)
<b>Pollutant:</b>	Nitrogen, Nitrite
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.</p>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information for this recommendation, SWRCB staff concludes that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303 (d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.
<b>Lines of Evidence:</b>	

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<i>Line of Evidence</i>	Remedial Program in Place
<i>Beneficial Use</i>	MU - Municipal & Domestic
<i>Information Used to Assess Water Quality:</i>	A TMDL for this water segment-pollutant combination was approved by the RWQCB in October 2002. The TMDL has an approved implementation plan. USEPA approved the TMDL on June 20, 2003.

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## Region 4

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**Water Segment:** Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998 303d list)

**Pollutant:** PCBs (dioxin-like)

**Decision:** Do Not 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. Two samples exceed the USEPA screening value but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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.
6. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
2. Two of 2 samples exceeded the USEPA Screening value. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy.
3. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.
<i>Evaluation Guideline:</i>	USEPA Screening Value: 5.47 ug/kg (USEPA, 2000). Section 6.1.3 of the Listing Policy does not allow the use of MTRs to evaluate fish and shellfish tissue data.
<i>Data Used to Assess Water Quality:</i>	Two composite tissue samples, 2 samples exceeding (TSMP, 2002).
<i>Spatial Representation:</i>	Samples were collected spatially.

*Temporal Representation:* One-time sample.

*Data Quality Assessment:* TSMP

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## Region 4

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**Water Segment:** Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998 303d list)

**Pollutant:** Toxaphene

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.5 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 against removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 4 samples exceeded the NAS Guideline (whole fish). A minimum of 48 samples would be needed in order for this water body to be delisted for this pollutant with 4 exceedances.
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 not be removed from 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:

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***Numeric Line of Evidence***

Pollutant-Tissue

***Beneficial Use:***

CM - Commercial and Sport Fishing (CA)

***Matrix:***

Tissue

***Water Quality Objective/  
Water Quality Criterion:***

Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.

***Evaluation Guideline:***

100 ng/g - NAS Guideline (Whole fish).

***Data Used to Assess Water  
Quality:***

Four out of 4 samples exceeded. Two whole fish composite samples of fathead minnow and 2 whole fish composite samples of mosquitofish were collected. Fathead minnow were collected in 1992. Mosquitofish were collected in 1998. The guideline was exceeded in all samples (TSMP, 2002).

***Spatial Representation:***

One station located at Rancho Road crossing south west of Camarillo.

*Temporal Representation:*

Samples were collected annually in 1992 and 1998.

*Data Quality Assessment:*

Toxic Substances Monitoring Program 1992-93 Data Report.

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

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## Region 4

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<b>Water Segment:</b>	Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2 on 1998 303d list)
<b>Pollutant:</b>	Ammonia
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This water quality condition is being considered for listing under Water Quality limited segment being addressed (section 2.2) of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this water body condition. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Qualitative excess algal growth information is backed by nutrient data and is sufficient to support continued placement on the section 303(d) list (Listing Policy section 3.7).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.</p>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

### Lines of Evidence:

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<i>Line of Evidence</i>	Remedial Program in Place
<i>Beneficial Use</i>	CO - Cold Freshwater Habitat, MU - Municipal & Domestic
<i>Information Used to Assess Water Quality:</i>	A TMDL for this water segment-pollutant combination was approved by the RWQCB in October 2002. The TMDL has an approved implementation plan. USEPA approved the TMDL on June 20, 2003.

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## Region 4

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**Water Segment:** Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2 on 1998 303d list)

**Pollutant:** Fecal Coliform

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under section 4.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Three samples exceed the fecal coliform water quality objective but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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 quantity requirements of section 6.1.5 of the Policy.
2. Three of 12 samples exceeded the fecal coliform water quality objective. At least 26 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.2 of the Listing Policy.
3. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

**Lines of Evidence:**

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	R1 - Water Contact Recreation
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: In waters designated for water contact recreation (REC-1), the fecal coliform concentration shall not exceed a log mean of 200/100 ml (based on a minimum of not less than four samples for any 30-day period), nor shall more than 10 percent of total samples during any 30-day period exceed 400/100 ml.
<i>Data Used to Assess Water Quality:</i>	Twelve bacteria samples, 3 samples exceeding WQO. Geomean of 243 exceeds 200/100 ml (SWRCB, 2003).

*Spatial Representation:* One site.  
*Temporal Representation:* All seasons during 1998-1999.  
*Data Quality Assessment:* Calleguas Creek Characterization Study

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## Region 4

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<b>Water Segment:</b>	Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo Crk Reaches 2 & 3, and lower Conejo Crk/Arroyo Conejo N Fk on 1998 303d list)
<b>Pollutant:</b>	Fecal Coliform
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under section 4.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Eleven samples exceed the water quality objective but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>2. Eleven of 24 samples exceeded the fecal coliform water quality objective. At least 26 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.2 of the Listing Policy.</li><li>3. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.
<b>Lines of Evidence:</b>	

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<b><i>Beneficial Use:</i></b>	R1 - Water Contact Recreation
<b><i>Matrix:</i></b>	Water
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	Basin Plan: In waters designated for water contact recreation (REC-1), the fecal coliform concentration shall not exceed a log mean of 200/100 ml (based on a minimum of not less than four samples for any 30-day period), nor shall more than 10 percent of total samples during any 30-day period exceed 400/100 ml.
<b><i>Data Used to Assess Water Quality:</i></b>	Twenty-four bacteria samples, 11 samples exceeding the 400/100 ml standard. Geomean of 431 exceeds 200/100 ml standard (SWRCB, 2003).

*Spatial Representation:* Two sites.  
*Temporal Representation:* Summer, fall, winter, spring.  
*Data Quality Assessment:* Calleguas Creek Characterization Study

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## Region 4

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**Water Segment:** Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo Crk Reaches 2 & 3, and lower Conejo Crk/Arroyo Conejo N Fk on 1998 303d list)

**Pollutant:** Nitrogen, Nitrite

**Decision:** Do Not Delist

**Weight of Evidence:** This water quality condition is being considered for listing under Water Quality limited segment being addressed (section 2.2) of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this water body condition. One line of evidence indicates that there is insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list because 5 of 42 samples exceeded the water quality objective. In addition, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Qualitative excess algal growth information is backed by nutrient data and is sufficient to support continued placement on the section 303(d) list.

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

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

### Lines of Evidence:

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<b><i>Beneficial Use:</i></b>	GW - Groundwater Recharge
<b><i>Matrix:</i></b>	Water
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	Basin Plan: Waters shall not exceed 10 mg/L nitrogen as nitrate-nitrogen plus nitrite-nitrogen (NO <sub>2</sub> -N), 45 mg/L as nitrate (NO <sub>3</sub> ), 10 mg/L as nitrate-nitrogen (NO <sub>3</sub> -N), or 1 mg/L nitrite-nitrogen (NO <sub>2</sub> -N) or as otherwise designated in [another part of the Basin Plan].
<b><i>Data Used to Assess Water Quality:</i></b>	Forty-two water samples, 5 samples exceeding (SWRCB, 2003).
<b><i>Spatial Representation:</i></b>	One site.
<b><i>Temporal Representation:</i></b>	Summer, fall, winter spring.



*Environmental Conditions:* Data 2-5 years old, data measured at site, data measured during all seasons.  
*Data Quality Assessment:* NPDES Program and Calleguas Creek Ambient Water Quality Monitoring Program

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***Line of Evidence*** Remedial Program in Place  
*Beneficial Use* CO - Cold Freshwater Habitat, MU - Municipal & Domestic  
*Information Used to Assess Water Quality:* A TMDL for this water segment-pollutant combination was approved by the RWQCB in October 2002. The TMDL has an approved implementation plan. USEPA approved the TMDL on June 20, 2003.

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## Region 4

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**Water Segment:** Calleguas Creek Reach 11 (Arroyo Santa Rosa, was part of Conejo Creek Reach 3 on 1998 303d list)

**Pollutant:** Ammonia

**Decision:** Do Not Delist

**Weight of Evidence:** This water quality condition is being considered for listing under Water Quality limited segment being addressed (section 2.2) of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this water body condition. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Qualitative excess algal growth information is backed by nutrient data and is sufficient to support continued placement on the section 303(d) list (Listing Policy section 4.7).

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* MU - Municipal & Domestic

*Information Used to Assess Water Quality:* A TMDL for this water segment-pollutant combination was approved by the RWQCB in October 2002. The TMDL has an approved implementation plan. USEPA approved the TMDL on June 20, 2003.

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## Region 4

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**Water Segment:** Calleguas Creek Reach 11 (Arroyo Santa Rosa, was part of Conejo Creek Reach 3 on 1998 303d list)

**Pollutant:** Fecal Coliform

**Decision:** Do Not 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. Six samples exceed the water quality objective but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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.It is unknown whether the data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2.The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3.Six of 12 samples exceeded the fecal coliform water quality objective. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy.
- 4.Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

**Lines of Evidence:**

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***Numeric Line of Evidence***

Pollutant-Water

***Beneficial Use:***

R1 - Water Contact Recreation

***Matrix:***

Water

***Water Quality Objective/  
Water Quality Criterion:***

Basin Plan: In waters designated for water contact recreation (REC-1), the fecal coliform concentration shall not exceed a log mean of 200/100 ml (based on a minimum of not less than four samples for any 30-day period), nor shall more than 10 percent of total samples during any 30-day period exceed 400/100 ml.

*Data Used to Assess Water Quality:* Twelve water samples with 6 samples exceeding the 400/100 ml standard. Geomean of 393 exceeds 200/100 ml (SWRCB, 2003).

*Spatial Representation:* One site.

*Temporal Representation:* Summer, fall, winter, spring.

*Data Quality Assessment:* Calleguas Creek Characterization Study

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## Region 4

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<b>Water Segment:</b>	Calleguas Creek Reach 12 (was Conejo Creek/Arroyo Conejo North Fork on 1998 303d list)
<b>Pollutant:</b>	Ammonia
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.</p>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information for this recommendation, SWRCB staff concludes that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303 (d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.
<b>Lines of Evidence:</b>	

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<i>Line of Evidence</i>	Remedial Program in Place
<i>Beneficial Use</i>	MU - Municipal & Domestic
<i>Information Used to Assess Water Quality:</i>	A TMDL for this water segment-pollutant combination was approved by the RWQCB in October 2002. The TMDL has an approved implementation plan. USEPA approved the TMDL on June 20, 2003.

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## Region 4

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<b>Water Segment:</b>	Calleguas Creek Reach 13 (Conejo Creek South Fork, was Conejo Cr Reach 4 and part of Reach 3 on 1998 303d list)
<b>Pollutant:</b>	Ammonia
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This water quality condition is being considered for listing under Water Quality limited segment being addressed (section 2.2) of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this water body condition. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Qualitative excess algal growth information is backed by nutrient data and is sufficient to support continued placement on the section 303(d) list (Listing Policy section 4.7).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.</p>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body and pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

### Lines of Evidence:

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<i>Line of Evidence</i>	Remedial Program in Place
<i>Beneficial Use</i>	CO - Cold Freshwater Habitat, MU - Municipal & Domestic
<i>Information Used to Assess Water Quality:</i>	A TMDL for this water segment-pollutant combination was approved by the RWQCB in October 2002. The TMDL has an approved implementation plan. USEPA approved the TMDL on June 20, 2003.

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## Region 4

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<b>Water Segment:</b>	Calleguas Creek Reach 13 (Conejo Creek South Fork, was Conejo Cr Reach 4 and part of Reach 3 on 1998 303d list)
<b>Pollutant:</b>	Chloride
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>2. Seventeen of 19 samples exceeded the water quality objective. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy.</li><li>3. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.
<b>Lines of Evidence:</b>	

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	AG - Agricultural Supply
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan WQO: Chloride 1.5 mg/L.
<i>Data Used to Assess Water Quality:</i>	Nineteen water samples, 17 samples exceeding (SWRCB, 2003).
<i>Spatial Representation:</i>	Two sites.
<i>Temporal Representation:</i>	Summer, fall, winter, spring.
<i>Data Quality Assessment:</i>	NPDES reports.

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## Region 4

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**Water Segment:** Canada Larga (Ventura River Watershed)

**Pollutant:** Fecal Coliform

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. One sample exceed the water quality objective but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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.It is unknown whether the data used satisfies the data quality requirements of section 6.1.4 of the Policy.
- 2.It is unknown whether the data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3.One of 9 samples exceeded the water quality objective. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy.
- 4.Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

**Lines of Evidence:**

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***Numeric Line of Evidence***

Pollutant-Water

***Beneficial Use:***

R1 - Water Contact Recreation

***Matrix:***

Water

***Water Quality Objective/  
Water Quality Criterion:***

Basin Plan: In waters designated for water contact recreation (REC-1), the fecal coliform concentration shall not exceed a log mean of 200/100 ml (based on a minimum of not less than four samples for any 30-day period), nor shall more than 10 percent of total samples during any 30-day period exceed 400/100 ml.



<i>Data Used to Assess Water Quality:</i>	One of 9 samples exceeded (SWRCB, 2003).
<i>Spatial Representation:</i>	Unknown.
<i>Temporal Representation:</i>	Different seasons and years.
<i>Data Quality Assessment:</i>	Unknown.

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## Region 4

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**Water Segment:** Castlerock Beach

**Pollutant:** Bacteria Indicators

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity (section 2 of the Listing Policy).

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

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## Region 4

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**Water Segment:** Compton Creek

**Pollutant:** pH

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R2 - Non-Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004.

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## Region 4

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**Water Segment:** Coyote Creek

**Pollutant:** Copper

**Decision:** Do Not Delist

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

One line of applicable evidence is available in the administrative record to assess this pollutant. A sufficient number of samples exceeds the CTR dissolved copper criterion for continuous concentration (CCC) in water for the protection of aquatic life. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification 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. Seventeen of 63 samples exceed the CTR Dissolved Copper Criterion for continuous concentration (CCC) in water for the protection of aquatic life and this exceeds 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 not be removed from on the section 303(d) list because applicable water quality standards are exceeded and the pollutant contributes to or causes the problem.

### Lines of Evidence:

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***Numeric Line of Evidence***

Pollutant-Water

***Beneficial Use:***

WA - Warm Freshwater Habitat

***Matrix:***

Water

***Water Quality Objective/  
Water Quality Criterion:***

CTR Dissolved Copper Criterion for continuous concentration (CCC) in water for the protection of aquatic life is expressed as a function of the total hardness of the water body. The aquatic life criteria will vary depending of total hardness reported at the sampling site. The CCC for dissolved copper is the highest concentration to which aquatic life can be exposed for an extended period of time (four days) without deleterious effects. This criterion is linked and applicable for the protection of aquatic life Beneficial Uses.

***Data Used to Assess Water Quality:***

Numeric data generated from 63 samples taken from 11/10/97 to 1/13/04 at one to two-week sampling interval. 17 samples exceeded the dissolved copper continuous criterion concentration, which equals the highest concentration of a

pollutant to which aquatic life can be exposed for an extended period of time (4days) without deleterious effects (LACSD, 2004) (LACDPW, 2004).

<i>Spatial Representation:</i>	One (1) sampling station sampled from 11/10/97 to 1/13/04. Los Angeles Department of Public Works mass emission station at Spring Street on Coyote Creek.
<i>Temporal Representation:</i>	Sixty-three samples taken during the wet season from 11/10/97 to 1/13/04 at approximately one to two week intervals.
<i>Environmental Conditions:</i>	Results are from samples taken from 1997 to 2004. Sampling was carried out at Spring Street on Coyote Creek during the wet season.
<i>Data Quality Assessment:</i>	Evaluation of Analytes and QA/QC Specifications for Monitoring Program (Woodward-Clyde, 1996) Los Angeles County Department of Public Works.

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<i>Beneficial Use:</i>	MU - Municipal & Domestic
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	There is no guideline applicable to determine exceedances due to total Copper.
<i>Data Used to Assess Water Quality:</i>	Numeric data generated from 21 samples taken from 10/30/00 to 4/30/03 at one to two-week sampling interval. It was not possible to determine any exceedances of total copper concentration in this water body because there is not guideline applicable to assess the effect of the total fraction of this pollutant available (LACDPW, 2004).
<i>Spatial Representation:</i>	One sample site sampled during the dry and wet season beginning from 10/12/00 through 4/30/03 at approximately one to two week intervals.
<i>Temporal Representation:</i>	Twenty-one samples where taken during the wet and dry season from 10/12/00 to 4/30/03 at approximately one to two week intervals as part of the Los Angeles County Storm water monitoring program prepared by the Los Angeles County Department of Public Works.
<i>Environmental Conditions:</i>	The Coyote Creek Monitoring Station (S13) is located at the existing ACOE stream gage station (Stream Gage No. F354-R) below Spring Street in the lower San Gabriel River watershed. The site assists in determining mass loading for the San Gabriel River watershed. At this location, the upstream tributary area is 150 square miles (extending into Orange County). The sampling site was chosen to avoid backwater effects from the San Gabriel River. Coyote Creek, at the gauging station, is a concrete lined trapezoidal channel. The Coyote Creek sampling location has been an active stream gauging station since 1963.
<i>Data Quality Assessment:</i>	Evaluation of Analytes and QA/QC Specifications for Monitoring Program (Woodward-Clyde, 1996) Los Angeles County Department of Public Works.

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## Region 4

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**Water Segment:** Coyote Creek

**Pollutant:** Lead

**Decision:** Do Not 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 applicable line of evidence is available in the administrative record to assess this pollutant. A sufficient number of samples exceed the CTR dissolved lead water quality criteria. Total lead was detected in ten (10) samples taken from 11/12/01 through 4/30/03, but data reported could not be compared against any established criteria or WQO for the protection of any beneficial use in fresh water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination 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. Six of 64 samples exceeded the CTR criteria for the dissolved fraction of lead and this exceeds 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 not be removed from the section 303(d) list because applicable water quality standards for the pollutant are exceeded.

### Lines of Evidence:

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***Numeric Line of Evidence***

Pollutant-Water

***Beneficial Use:***

MU - Municipal & Domestic, WA - Warm Freshwater Habitat

***Matrix:***

Water

***Water Quality Objective/  
Water Quality Criterion:***

There is no fresh water WQO or criteria for Total Lead linked or applicable with protection of Warm Fresh Water Habitat or MUN BUs.

***Data Used to Assess Water  
Quality:***

Numeric data generated from 21 samples taken from 10/30/00 to 4/30/03 at one to two-week sampling interval. Total lead was detected in ten (10) samples taken from 11/12/01 through 4/30/03. Data reported could not be compared against any established criteria or WQO established for total lead for the protection of any beneficial use in fresh water (LACSD, 2004); (LACDPW, 2004).

***Spatial Representation:***

One sample site sampled during the dry and wet season beginning from 10/12/00

through 4/30/03 at approximately one to two week intervals.

*Temporal Representation:* Twenty-one (21) samples were taken during the wet and dry season from 10/12/00 to 4/30/03 at approximately one to two week intervals as part of the Los Angeles County Storm water monitoring program prepared by the Los Angeles County Department of Public Works.

*Environmental Conditions:* The Coyote Creek Monitoring Station (S13) is located at the existing ACOE stream gage station (Stream Gage No. F354-R) below Spring Street in the lower San Gabriel River watershed. The site assists in determining mass loading for the San Gabriel River watershed. At this location, the upstream tributary area is 150 square miles (extending into Orange County). The sampling site was chosen to avoid backwater effects from the San Gabriel River. Coyote Creek, at the gauging station, is a concrete lined trapezoidal channel. The Coyote Creek sampling location has been an active stream gauging station since 1963.

*Data Quality Assessment:* Evaluation of Analytes and QA/QC Specifications for Monitoring Program (Woodward-Clyde, 1996) Los Angeles County Department of Public Works.

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***Numeric Line of Evidence*** Pollutant-Water

*Beneficial Use:* WA - Warm Freshwater Habitat

*Matrix:* Water

*Water Quality Objective/  
Water Quality Criterion:* CTR Dissolved Lead Criterion for continuous concentration (CCC) in water for the protection of aquatic life is expressed as a function of the total hardness of the water body. The aquatic life criteria will vary depending on total hardness reported at the sampling site. The CCC for dissolved lead is the highest concentration to which aquatic life can be exposed for an extended period of time (four days) without deleterious effects. This criterion is linked and applicable for the protection of aquatic life Beneficial Uses.

*Data Used to Assess Water Quality:* Numeric data generated from 64 samples taken from 11/10/97 to 1/13/04 at one to two-week sampling interval. Six samples exceeded the dissolved lead continuous criterion concentration, which equals the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects (LACSD, 2004) (LACDPW 2004).

*Spatial Representation:* One (1) sampling station sampled from 11/10/97 to 1/13/04. Los Angeles Department of Public Works mass emission station at Spring Street on Coyote Creek.

*Temporal Representation:* Sixty-four (64) samples taken during the wet season from 11/10/97 to 1/13/04 at approximately one to two week intervals.

*Environmental Conditions:* Results are from samples taken from 1997 to 2004. Sampling was carried out at Spring Street on Coyote Creek during the wet season.

*Data Quality Assessment:* Evaluation of Analytes and QA/QC Specifications for Monitoring Program (Woodward-Clyde, 1996) Los Angeles County Department of Public Works.

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## Region 4

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**Water Segment:** Dan Blocker Memorial (Coral) Beach

**Pollutant:** Coliform Bacteria

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

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## Region 4

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**Water Segment:** Dockweiler Beach

**Pollutant:** Coliform Bacteria

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

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## Region 4

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**Water Segment:** Dominguez Channel (lined portion above Vermont Ave)

**Pollutant:** Copper

**Decision:** Do Not Delist

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

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of not removing the S28 segment located at Dominguez Channel and Artesia Blvd in the City of Torrance 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. Sixteen of the 19 samples taken between 2000-2003 exceed the CTR Criteria for protection of aquatic life. Although 19 samples is not enough to determine with the confidence and power of the Listing Policy, a minimum of 188 samples would be needed in order for 16 exceedances to result in a delisting.
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 not be removed from 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:

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***Numeric Line of Evidence***

Pollutant-Water

***Beneficial Use:***

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

***Matrix:***

Water

***Water Quality Objective/  
Water Quality Criterion:***

CTR dissolved copper criteria for continuous concentration (CCC) and maximum concentration (CMC) in water for the protection of aquatic life are expressed as a function of the total hardness of the water body. The aquatic life criteria will vary depending of total hardness reported at the sampling site. The CCC for dissolved copper is the highest concentration to which aquatic life can be exposed for an extended period of time (e.g., four days) without deleterious effects. The CMC for dissolved copper is the highest concentration to which aquatic life can be exposed for a short period of time (e.g., one hour) without

deleterious effects. These criteria are linked and applicable for the protection of aquatic life beneficial uses. Calculation of the criteria based on ambient hardness at the time of sampling resulted in copper CCCs ranging from 2.26 to 16.88 ug/l; and CMCs ranging from 2.95 to 27.04 ug/L.

*Data Used to Assess Water Quality:*

Twelve out of 12 samples exceed both the CCC and CMC (LACDWP, 2003a).

*Spatial Representation:*

Samples were taken at the Dominguez Channel Monitoring Station (S23) which is located within the Dominguez Channel/Los Angeles Harbor watershed in Lennox, near Los Angeles International Airport (LAX). The monitoring station is near the intersection of 116th Street and Isis Avenue. The overall watershed land use is predominantly transportation, and includes areas of LAX and Interstate 105.

*Temporal Representation:*

Samples were taken in October 2000, and in January through April 2001.

*Environmental Conditions:*

According to the County of Los Angeles, Department of Public Works, Stormwater Monitoring Reports, 2000-2001 Monitoring Report samples were taken during storm events, the amount of rainfall was not noted.

*Data Quality Assessment:*

Evaluation of Analytes and QA/QC Specifications for Monitoring Program (Woodward-Clyde, 1996) Los Angeles County Department of Public Works.

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***Numeric Line of Evidence***

Pollutant-Water

*Beneficial Use:*

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

*Matrix:*

Water

*Water Quality Objective/  
Water Quality Criterion:*

CTR dissolved copper criteria for continuous concentration (CCC) and maximum concentration (CMC) in water for the protection of aquatic life are expressed as a function of the total hardness of the water body. The aquatic life criteria will vary depending of total hardness reported at the sampling site. The CCC for dissolved copper is the highest concentration to which aquatic life can be exposed for an extended period of time (e.g., four days) without deleterious effects. The CMC for dissolved copper is the highest concentration to which aquatic life can be exposed for a short period of time (e.g., one hour) without deleterious effects. These criteria are linked and applicable for the protection of aquatic life beneficial uses.

Calculation of the criteria based on ambient hardness at the time of sampling resulted in copper CCCs ranging from 1.79 to 18.25 ug/l; and CMCs ranging from 2.28 to 29.46 ug/L.

*Data Used to Assess Water Quality:*

Four out of 6 samples exceeded both the CCC and CMC (LACDWP, 2003a).

*Spatial Representation:*

Samples were taken at the Dominguez Channel Monitoring Station (S28) which is located at Dominguez Channel and Artesia Boulevard in the City of Torrance. At this location, which was chosen to avoid tidal influence, the upstream tributary area is 33 square miles. The portion of the river where the monitoring site is located is a concrete-lined rectangular channel.

*Temporal Representation:*

Samples were taken October through December 2002, and February through April 2003. The positive quantification limit (PQL) of the sample taken on

3/15/03 was higher than the CCC criteria, however sample concentration results was even greater.

*Environmental Conditions:* According to the County of Los Angeles, Department of Public Works, Stormwater Monitoring Reports, 2002-2003 Monitoring Report samples were taken during storm events, the amount of rainfall was not noted.

*Data Quality Assessment:* Evaluation of Analytes and QA/QC Specifications for Monitoring Program (Woodward-Clyde, 1996) Los Angeles County Department of Public Works.

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***Numeric Line of Evidence***

Pollutant-Water

*Beneficial Use:*

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

*Matrix:*

Water

*Water Quality Objective/  
Water Quality Criterion:*

CTR dissolved copper criteria for continuous concentration (CCC) and maximum concentration (CMC) in water for the protection of aquatic life are expressed as a function of the total hardness of the water body. The aquatic life criteria will vary depending of total hardness reported at the sampling site. The CCC for dissolved copper is the highest concentration to which aquatic life can be exposed for an extended period of time (e.g., four days) without deleterious effects. The CMC for dissolved copper is the highest concentration to which aquatic life can be exposed for a short period of time (e.g., one hour) without deleterious effects. These criteria are linked and applicable for the protection of aquatic life beneficial uses.

Calculation of the criteria based on ambient hardness at the time of sampling resulted in copper CCCs ranging from 1.79 to 18.25 ug/l; and CMCs ranging from 2.28 to 29.46 ug/L.

*Data Used to Assess Water Quality:*

The single sample taken exceeded both the CCC and CMC (LACDWP, 2003a).

*Spatial Representation:*

Samples were taken at the Dominguez Channel Monitoring Station (S28) which is located at Dominguez Channel and Artesia Boulevard in the City of Torrance. At this location, which was chosen to avoid tidal influence, the upstream tributary area is 33 square miles. The portion of the river where the monitoring site is located is a concrete-lined rectangular channel.

*Temporal Representation:*

The sample was taken in January 2002.

*Environmental Conditions:*

According to the County of Los Angeles, Department of Public Works, Stormwater Monitoring Reports, 2001-2002 Monitoring Report samples were taken during storm events, the amount of rainfall was not noted.

*Data Quality Assessment:*

Evaluation of Analytes and QA/QC Specifications for Monitoring Program (Woodward-Clyde, 1996) Los Angeles County Department of Public Works.

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## Region 4

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**Water Segment:** Dominguez Channel (lined portion above Vermont Ave)

**Pollutant:** Total Fecal Coliform

**Decision:** Do Not 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 4.2 a single line of evidence is necessary to assess delisting status.

Three lines of evidence from different sampling years are available in the administrative record to assess this pollutant. In all sample sets a number of samples exceeded bacterial water quality objective.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 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 out of 12 samples exceeded the fecal coliform bacteria water quality objective. Although this is not enough samples to determine with the confidence and power of the Listing Policy, a minimum of 67 samples would be needed in order for eleven exceedances to result in a delisting.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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***Numeric Line of Evidence***

Pollutant-Water

***Beneficial Use:***

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

***Matrix:***

Water

***Water Quality Objective/  
Water Quality Criterion:***

Basin Plan single sample water quality objective for fecal coliform in fresh waters designated REC-1 is fecal coliform density shall not exceed 400/100ml MPN.

***Data Used to Assess Water Quality:***

Four out of 4 samples exceeded the 400 MPN limit, sample results ranged from 900 to 17,000 MPN

*Spatial Representation:* Samples were taken at the Dominguez Channel Monitoring Station (S23) which is located within the Dominguez Channel/Los Angeles Harbor watershed in Lennox, near Los Angeles International Airport (LAX). The monitoring station is near the intersection of 116th Street and Isis Avenue. The overall watershed land use is predominantly transportation, and includes areas of LAX and Interstate 105.

*Temporal Representation:* Samples were taken 1/30/01, 2/15/01, 2/28/01, and 3/7/01.

*Environmental Conditions:* According to the County of Los Angeles, Department of Public Works, Stormwater Monitoring Reports, 2000-2001 Monitoring Report samples were taken during storm events, the amount of rainfall was not noted.

*Data Quality Assessment:* Evaluation of Analytes and QA/QC Specifications for Monitoring Program (Woodward-Clyde, 1996) Los Angeles County Department of Public Works.

***Numeric Line of Evidence*** Pollutant-Water

*Beneficial Use:* MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

*Matrix:* Water

*Water Quality Objective/  
Water Quality Criterion:* Basin Plan single sample water quality objective for fecal coliform in fresh waters designated REC-1 is fecal coliform density shall not exceed 400/100ml MPN.

*Data Used to Assess Water Quality:* Two of 2 samples exceeded the 400 MPN objective. One sample was 5,000, the other 6,000 MPN.

*Spatial Representation:* Samples were taken at the Dominguez Channel Monitoring Station (S28) which is located at Dominguez Channel and Artesia Boulevard in the City of Torrance. At this location, which was chosen to avoid tidal influence, the upstream tributary area is 33 square miles. The portion of the river where the monitoring site is located is a concrete-lined rectangular channel.

*Temporal Representation:* Samples were taken on 1/28/02 and 3/19/02.

*Environmental Conditions:* According to the County of Los Angeles, Department of Public Works, Stormwater Monitoring Reports, 2001-2002 Monitoring Report samples were taken during storm events, the amount of rainfall was not noted.

*Data Quality Assessment:* Evaluation of Analytes and QA/QC Specifications for Monitoring Program (Woodward-Clyde, 1996) Los Angeles County Department of Public Works.

***Numeric Line of Evidence*** Pollutant-Water

*Beneficial Use:* MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

*Matrix:* Water

*Water Quality Objective/  
Water Quality Criterion:* Basin Plan single sample water quality objective for fecal coliform in fresh waters designated REC-1 is fecal coliform density shall not exceed 400/100ml MPN.

<i>Data Used to Assess Water Quality:</i>	Five out of six samples exceeded the 400 MPN objective. Samples exceeding the objective ranged from 2,300 to 240,000 MPN.
<i>Spatial Representation:</i>	Samples were taken at the Dominguez Channel Monitoring Station (S28) which is located at Dominguez Channel and Artesia Boulevard in the City of Torrance. At this location, which was chosen to avoid tidal influence, the upstream tributary area is 33 square miles. The portion of the river where the monitoring site is located is a concrete-lined rectangular channel.
<i>Temporal Representation:</i>	Samples taken on 10/10/02, 11/8/02, 12/16/02, 2/11/03, and 3/15/03 exceeded the objective. A sample taken on 4/30/03 did not exceed the objective.
<i>Environmental Conditions:</i>	According to the County of Los Angeles, Department of Public Works, Stormwater Monitoring Reports, 2002-2003 Monitoring Report samples were taken during storm events, the amount of rainfall was not noted.
<i>Data Quality Assessment:</i>	Evaluation of Analytes and QA/QC Specifications for Monitoring Program (Woodward-Clyde, 1996) Los Angeles County Department of Public Works.

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## Region 4

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**Water Segment:** Dominguez Channel Estuary (unlined portion below Vermont Ave)

**Pollutant:** Lead

**Decision:** Do Not 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 faulty. Three different lines of evidence are available in the administrative record to assess this pollutant.

Lead in tissue was used in 2002 to list this segment. The listing was based on EDLs or MTRL and these guidelines do not meet the requirements of the Listing Policy. In addition only one tissue sample was taken in 1992 at a one site and this is not representative of the water segment.

Sediment samples were exceeded between 1994 and 2004 and this exceeds the allowable frequency listed in Table 3.1, The Listing Policy also requires that the pollutant be linked with observed toxicity or benthic community impacts in order for the segment to be listed. Only one toxicity sample and one benthic community sample was collected in 1996 and although the total number of samples is not sufficient to establish the linkage required by the Listing Policy the benthic community sample was of sufficient magnitude to indicate a linkage between pollutant and benthic community impacts.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for replacing the lead in tissue listing with lead in sediment for this water segment-pollutant combination.

This conclusion is based on the staff findings that there is insufficient data available to assess the status of this water body for lead in tissue because there are no applicable tissue guidelines for this pollutant. However 29 of 93 core grab sediment samples exceeded the Probable Effects Level of 112.18 ug/l for lead and benthic community impacts were recorded. 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 lead in tissue should be replaced with lead in sediment water body-pollutant combination in the 303(d) list. The tissue listing was based on faulty evaluation guidelines but lead in the sediment was found to exceed applicable sediment quality guidelines and the benthic community impacts documented may be caused or contribute to by this pollutant.

### Lines of Evidence:

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*Numeric Line of Evidence* Pollutant-Tissue

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



<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.
<i>Evaluation Guideline:</i>	There is no tissue guideline available for this pollutant that meets the requirements of section 6.1.3 of the Listing Policy. The original listing was based on an EDL and MTRL. The Listing Policy does not allow the use of EDLs or MTRLs in listing or delisting decisions.
<i>Data Used to Assess Water Quality:</i>	One tissue sample is available. Mussel watch monitoring data is not available in the water segment (TSMP, 2002).
<i>Spatial Representation:</i>	One station.
<i>Temporal Representation:</i>	The sample was collected in 1992.
<i>Data Quality Assessment:</i>	Toxic Substances Monitoring Program.

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Sediment
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use.
<i>Evaluation Guideline:</i>	A Probable Effect Level of 112.18 ug/g was used (MacDonald et al., 1996).
<i>Data Used to Assess Water Quality:</i>	Of the 93 core and grab sediment samples, 29 exceeded the sediment quality guideline (Anderson et al., 1998).
<i>Spatial Representation:</i>	The ninety-three samples were spread throughout the water body.
<i>Temporal Representation:</i>	The samples were collected between 1994 and 2002.
<i>Data Quality Assessment:</i>	Bay Protection and Toxic Cleanup Program Other quality assurance described in the Contaminated Sediments Task Force Database.

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<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat, MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use.
<i>Evaluation Guideline:</i>	The data were analyzed using the BPTCP reference envelope approach.
<i>Data Used to Assess Water Quality:</i>	One toxicity sample that showed 61 percent survival (Anderson et al., 1998).
<i>Spatial Representation:</i>	One station at H. Ford Bridge (BPTCP station 47010.0).
<i>Temporal Representation:</i>	The sample was collected in 1996.
<i>Data Quality Assessment:</i>	Bay Protection and Toxic Cleanup Program.

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<i>Numeric Line of Evidence</i>	Population/Community Degradation
<i>Beneficial Use:</i>	ES - Estuarine Habitat, MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use.
<i>Evaluation Guideline:</i>	Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community (Anderson et al., 1998).
<i>Data Used to Assess Water Quality:</i>	One benthic community sample with a benthic index of 0.21 (Anderson et al., 1998).
<i>Spatial Representation:</i>	One station at H. Ford Bridge (BPTCP station 47010.0).
<i>Temporal Representation:</i>	The sample was collected in 1996.
<i>Environmental Conditions:</i>	Adjacent waters (Consolidated Slip) also has degraded benthic communities.
<i>Data Quality Assessment:</i>	Bay Protection and Toxic Cleanup Program (Stephenson et al., 1994).

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## Region 4

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<b>Water Segment:</b>	Duck Pond Agricultural Drains/Mugu Drain/Oxnard Drain No 2
<b>Pollutant:</b>	Nitrogen
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.</p>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information for this recommendation, SWRCB staff concludes that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

### Lines of Evidence:

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<i>Line of Evidence</i>	Remedial Program in Place
<i>Beneficial Use</i>	MU - Municipal & Domestic
<i>Information Used to Assess Water Quality:</i>	A TMDL for this water segment-pollutant combination was approved by the RWQCB in October 2002. The TMDL has an approved implementation plan. USEPA approved the TMDL on June 20, 2003.

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## Region 4

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**Water Segment:** El Dorado Lakes

**Pollutant:** Mercury

**Decision:** Do Not Delist

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 2 samples exceeded the water quality objectives but the number of samples is insufficient to determine with the confidence and power required by 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.
<i>Evaluation Guideline:</i>	0.3 ug/g (OEHHA Screening Value).
<i>Data Used to Assess Water Quality:</i>	Two out of 2 samples exceeded. Two file composite samples of largemouth bass were collected. Bass were collected in 1992 and 1998. Both samples exceeded the guideline (TSMP, 2002).
<i>Spatial Representation:</i>	One station located in northern most lake in El Dorado Park.
<i>Temporal Representation:</i>	Samples were collected in 1992 and 1998.
<i>Data Quality Assessment:</i>	Toxic Substances Monitoring Program 1992-93 Data Report. Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish and Game

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## Region 4

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**Water Segment:** Fox Barranca (tributary to Calleguas Creek Reach 6)

**Pollutant:** Nitrate and Nitrite

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

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

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* MU - Municipal & Domestic

*Information Used to Assess Water Quality:* A TMDL for this water segment-pollutant combination was approved by the RWQCB in October 2002. The TMDL has an approved implementation plan. USEPA approved the TMDL on June 20, 2003.

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## Region 4

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**Water Segment:** Hobie Beach (Channel Islands Harbor)

**Pollutant:** Bacteria Indicators

**Decision:** Do Not 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 4.2 a single line of evidence is necessary to assess delisting status.

One line of evidence from data collected in 1999, 2000, and 2001 is available in the administrative record to assess this pollutant. This data set was probably used to place the water body segment on the 2002 303(d) list originally. 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 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. Forty-nine of 97 samples exceeded the 17 CCR bacteriological standard for water adjacent to public beaches and public water-contact sports areas and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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***Numeric Line of Evidence*** Pollutant-Water

***Beneficial Use:*** R1 - Water Contact Recreation

***Matrix:*** Water

***Water Quality Objective/  
Water Quality Criterion:*** 17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports areas shall be as follows:  
(1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed:  
(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or

- (B) 10,000 total coliform bacteria per 100 milliliters; or
- (C) 400 fecal coliform bacteria per 100 milliliters; or
- (D) 104 enterococcus bacteria per 100 milliliters.

<i>Data Used to Assess Water Quality:</i>	Forty-nine samples exceeding standards out of 97 samples (SWRCB, 2003).
<i>Spatial Representation:</i>	One station: V(36000). This station represents the beach 50 yards on either side of the sampling point.
<i>Temporal Representation:</i>	Data collected in 1999, 2000, and 2001.
<i>Data Quality Assessment:</i>	County Health Department

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## Region 4

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**Water Segment:** Hopper Creek

**Pollutant:** Sulfates

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. This data set was probably used to place this water body-combination on the 2002 303(d) list originally. 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 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. Eleven of 12 samples exceeded the sulfate 600 mg/l water quality objective but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

**Lines of Evidence:**

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*Numeric Line of Evidence* Pollutant-Water

*Beneficial Use:* AG - Agricultural Supply

*Matrix:* Water

*Water Quality Objective/  
Water Quality Criterion:* Basin Plan WQO: 600 mg/L.

*Data Used to Assess Water* Twelve water samples, 11 samples exceeding (SWRCB, 2003).



*Quality:*

*Spatial Representation:* At Hwy 126

*Temporal Representation:* Quarterly sampling events, 2002-2003.

*Data Quality Assessment:* United Water Conservation District

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## Region 4

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**Water Segment:** Hopper Creek

**Pollutant:** Total Dissolved Solids

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. This data set was probably used to place this water body - pollutant combination on the 2002 303(d) list originally. 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 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. Ten of 11 samples exceeded the total dissolved solids of 1,300 mg/l basin plan water quality objective but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

**Lines of Evidence:**

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	AG - Agricultural Supply
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan WQO: 1,300 mg/L.
<i>Data Used to Assess Water Quality:</i>	Eleven water samples, 10 samples exceeding (SWRCB, 2003).

*Spatial Representation:* Collected at Hwy. 126.  
*Temporal Representation:* Quarterly sampling events, 2002-2003.  
*Data Quality Assessment:* United Water Conservation District

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## Region 4

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**Water Segment:** Las Flores Beach

**Pollutant:** Coliform Bacteria

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity (section 2 of the Listing Policy).

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

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## Region 4

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**Water Segment:** Latigo Canyon Creek

**Pollutant:** Sulfates

**Decision:** Do Not Delist

**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. An insufficient total number of samples were taken and an insufficient number of samples exceed the MCL guideline for Sulfate.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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 two samples exceeded the MCL guideline. More data is needed to determine if the water quality standard is exceeded.
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 not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are exceeded.

### **Lines of Evidence:**

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***Numeric Line of Evidence***

Pollutant-Water

***Beneficial Use:***

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:***

CCR- Title 22 Table 64449-B Secondary Maximum Contaminant Levels of 250 mg/l for Sulfate.

***Data Used to Assess Water Quality:***

Two samples with two exceeding (SWAMP, 2004).

***Spatial Representation:***

One station at Latigo Canyon Creek Upper: 34.03758 -118.76575.

***Temporal Representation:***

Samples were collected March 2003 through March 2004.

*Environmental Conditions:* Los Angeles County Coastal Streams: 404.33.

*Data Quality Assessment:* SWAMP Quality Assurance Plan.

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## Region 4

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**Water Segment:** Long Point Beach

**Pollutant:** Coliform Bacteria

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

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## Region 4

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<b>Water Segment:</b>	Los Angeles Harbor - Consolidated Slip
<b>Pollutant:</b>	Cadmium
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for removal from the section 303(d) list under sections 4.6 and 4.9 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess delisting status while under section 4.9, a minimum of two lines of evidence are needed to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant sediment toxicity and the pollutant concentration exceeds the sediment guideline. The benthic community is impacted.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.</li><li>2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>4. Six of 20 samples exceeded the 4.21 ug/g PEL cadmium sediment guideline, 8 samples exhibit toxicity, and 4 sediment stations had a degraded benthic community. The four lines of evidence show that the water body segment exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. The benthic community in this water body is impacted and this pollutant is associated with this impact.</li><li>5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Sediment
<i>Beneficial Use:</i>	MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:



- Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally,
- Protecting food supplies for fish and wildlife,
- Protecting reproductive and nursery areas, and
- Protecting wildlife corridors.

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use (LARWQCB, 1995)

<i>Evaluation Guideline:</i>	PEL: 4.21 ug/g (MacDonald et al., 1996).
<i>Data Used to Assess Water Quality:</i>	Of the 41 sediment core and grab samples, 15 exceed the sediment quality guideline (LARWQCB and CCC, 2004).
<i>Spatial Representation:</i>	Samples were collected throughout the water body.
<i>Temporal Representation:</i>	Samples collected between 1992 and 1997.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan (Stephenson et al., 1994) Contaminated Sediments Task Force Database.

<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:  <ul style="list-style-type: none"> <li>-Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally,</li> <li>-Protecting food supplies for fish and wildlife,</li> <li>-Protecting reproductive and nursery areas, and</li> <li>-Protecting wildlife corridors.</li> </ul> (LARWQCB, 1995).
<i>Evaluation Guideline:</i>	Significant toxicity as compared to control conditions.
<i>Data Used to Assess Water Quality:</i>	Thirteen of 17 samples were significantly toxic (Anderson et al., 1998).
<i>Spatial Representation:</i>	Samples were collected throughout the estuary.
<i>Temporal Representation:</i>	Samples were collected in 1994 and 1996.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan (Stephenson et al., 1994).

<b><i>Numeric Line of Evidence</i></b>	Population/Community Degradation
<i>Beneficial Use:</i>	MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:

- Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally,
- Protecting food supplies for fish and wildlife,
- Protecting reproductive and nursery areas, and
- Protecting wildlife corridors.

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use (LARWQCB, 1995)

*Evaluation Guideline:*

Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community (Anderson et al., 1998).

*Data Used to Assess Water Quality:*

Eleven samples are available with 5 exhibiting degraded conditions and 6 with transitional community characteristics (Anderson et al., 1998).

*Spatial Representation:*

The samples were collected throughout the water body.

*Temporal Representation:*

Samples were collected in 1992 and 1996.

*Data Quality Assessment:*

BPTCP Quality Assurance Project Plan (Stephenson et al., 1994)

***Line of Evidence***

Remedial Program in Place

*Beneficial Use*

MA - Marine Habitat

*Information Used to Assess Water Quality:*

The Consolidated Toxic Hot Spots Cleanup Plan describes how the Los Angeles Contaminated Task Force will develop a plan for the cleanup of this site. While the planning has progressed, no remediation of the site has occurred. No responsible parties have been identified.

## Region 4

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**Water Segment:** Los Angeles Harbor - Consolidated Slip

**Pollutant:** Chlordane

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for delisting under sections 4.6 of the Listing Policy. Under section 4.6 two lines of evidence are necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, there is known significant toxicity and benthic impacts associated with this pollutant and the number of pollutant exceedances exceed the frequency allowed by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of not removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies, with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Thirty of 39 samples taken between 1993 and 1997 exceeded the 6ng/g Effects Range Medium sediment guideline, There is known significant sediment toxicity data and benthic community impacts associated with the water body segment, and pollutant concentrations exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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*Numeric Line of Evidence* Toxicity

*Beneficial Use:* MA - Marine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:

-Maintaining substrate characteristics necessary to support flora and fauna which

would be present naturally,  
-Protecting food supplies for fish and wildlife,  
-Protecting reproductive and nursery areas, and  
-Protecting wildlife corridors.  
(LARWQCB, 1995).

*Evaluation Guideline:* Significant toxicity as compared to control conditions.  
*Data Used to Assess Water Quality:* Thirteen of 17 samples were significantly toxic (Anderson et al., 1998).  
*Spatial Representation:* Samples were collected throughout the estuary.  
*Temporal Representation:* Samples were collected in 1994 and 1996.  
*Data Quality Assessment:* BPTCP Quality Assurance Project Plan (Stephenson et al., 1994).

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***Numeric Line of Evidence*** Population/Community Degradation  
*Beneficial Use:* MA - Marine Habitat  
*Matrix:* Sediment  
*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:  
  
-Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally,  
-Protecting food supplies for fish and wildlife,  
-Protecting reproductive and nursery areas, and  
-Protecting wildlife corridors.  
  
Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use (LARWQCB, 1995)  
  
*Evaluation Guideline:* Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community (Anderson et al., 1998).  
*Data Used to Assess Water Quality:* Eleven samples are available with 5 exhibiting degraded conditions and 6 with transitional community characteristics (Anderson et al., 1998).  
*Spatial Representation:* The samples were collected throughout the water body.  
*Temporal Representation:* Samples were collected in 1992 and 1996.  
*Data Quality Assessment:* BPTCP Quality Assurance Project Plan (Stephenson et al., 1994)

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***Numeric Line of Evidence*** Pollutant-Sediment  
*Beneficial Use:* MA - Marine Habitat  
*Matrix:* Sediment  
*Water Quality Objective/* Basin Plan: Surface waters shall not contain concentrations of chemical

<i>Water Quality Criterion:</i>	constituents in amounts that adversely affect any designated beneficial use (LARWQCB, 1995)
<i>Evaluation Guideline:</i>	An Effect Range Median of 6 ng/g was used (Long and Morgan, 1990).
<i>Data Used to Assess Water Quality:</i>	Of the 39 core and grab samples, 30 exceed the sediment quality guideline (LARWQCB and CCC, 2004).
<i>Spatial Representation:</i>	The samples are spread throughout the water body.
<i>Temporal Representation:</i>	Samples were collected between 1993 and 1997.
<i>Data Quality Assessment:</i>	Bay Protection and Toxic Cleanup Program (Stephenson et al., 1994) Contaminated Sediments Task Force Database.

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Tissue
<i>Beneficial Use:</i>	MA - Marine Habitat
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health (LARWQCB, 1995)
<i>Evaluation Guideline:</i>	OEHHA Screening Value: 2.0 ug/kg (Brodberg and Pollock, 1999).
<i>Data Used to Assess Water Quality:</i>	The guideline is not exceeded in any of the 12 measurements. The original listing was based on exceeding background levels rather than valid assessment guidelines (TSMP, 2002).
<i>Spatial Representation:</i>	One station.
<i>Temporal Representation:</i>	Data collected in most years from 1992 through 2003.
<i>Data Quality Assessment:</i>	State Mussel Watch Program.

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## Region 4

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**Water Segment:** Los Angeles Harbor - Consolidated Slip

**Pollutant:** Chromium (total)

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for delisting under sections 4.6 of the Listing Policy. Under section 4.6 two lines of evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, there is known significant toxicity and bioassessment data associated with this pollutant and the number of pollutant exceedances exceed the frequency allowed by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of not removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies, with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Twelve of 41 samples taken between 1992 and 1997 exceeded the 370 ug/g Effects Range Medium sediment guideline, There is known significant toxicity data and benthic community impacts associated with the water body segment, and pollutant concentrations exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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*Numeric Line of Evidence* Toxicity

*Beneficial Use:* MA - Marine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:

-Maintaining substrate characteristics necessary to support flora and fauna which

would be present naturally,  
 -Protecting food supplies for fish and wildlife,  
 -Protecting reproductive and nursery areas, and  
 -Protecting wildlife corridors.  
 (LARWQCB, 1995).

*Evaluation Guideline:* Significant toxicity as compared to control conditions.  
*Data Used to Assess Water Quality:* Thirteen of 17 samples were significantly toxic (Anderson et al., 1998).  
*Spatial Representation:* Samples were collected throughout the estuary.  
*Temporal Representation:* Samples were collected in 1994 and 1996.  
*Data Quality Assessment:* BPTCP Quality Assurance Project Plan (Stephenson et al., 1994).

***Numeric Line of Evidence*** Population/Community Degradation  
*Beneficial Use:* MA - Marine Habitat  
*Matrix:* Sediment  
*Water Quality Objective/  
 Water Quality Criterion:* Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:  
 -Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally,  
 -Protecting food supplies for fish and wildlife,  
 -Protecting reproductive and nursery areas, and  
 -Protecting wildlife corridors.  
 Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use (LARWQCB, 1995)

*Evaluation Guideline:* Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community (Anderson et al., 1998).  
*Data Used to Assess Water Quality:* Eleven samples are available with 5 exhibiting degraded conditions and 6 with transitional community characteristics (Anderson et al., 1998).  
*Spatial Representation:* The samples were collected throughout the water body.  
*Temporal Representation:* Samples were collected in 1992 and 1996.  
*Data Quality Assessment:* BPTCP Quality Assurance Project Plan (Stephenson et al., 1994)

***Numeric Line of Evidence*** Pollutant-Sediment  
*Beneficial Use:* MA - Marine Habitat  
*Matrix:* Sediment  
*Water Quality Objective/* Basin Plan: Surface waters shall not contain concentrations of chemical

<i>Water Quality Criterion:</i>	constituents in amounts that adversely affect any designated beneficial use (LARWQCB, 1995)
<i>Evaluation Guideline:</i>	An Effects Range-Median of 370 ug/g was used (Long et al., 1995).
<i>Data Used to Assess Water Quality:</i>	Of the 41 core and grab samples, 12 exceeded the sediment guideline (LARWQCB and CCC, 2004).
<i>Spatial Representation:</i>	The samples are spread throughout the water body.
<i>Temporal Representation:</i>	Samples collected between 1992 and 1997.
<i>Data Quality Assessment:</i>	Bay Protection and Toxic Cleanup Program (Stephenson et al., 1994) Contaminated Sediments Task Force Database.

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## Region 4

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**Water Segment:** Los Angeles Harbor - Consolidated Slip

**Pollutant:** Copper

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under sections 4.6 and 4.9 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess delisting status while under section 4.9, a minimum of two lines of evidence are needed to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant sediment toxicity and the pollutant concentration exceeds the sediment guideline. The benthic community is impacted.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Two of 20 samples exceeded the 270 ug/g cadmium sediment guideline, 8 samples exhibit toxicity, and 4 sediment stations had a degraded benthic community. The four lines of evidence show that the water body segment exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. The benthic community in this water body is impacted and this pollutant is associated with this impact.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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*Numeric Line of Evidence* Pollutant-Sediment

*Beneficial Use:* MA - Marine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:

- Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally,
- Protecting food supplies for fish and wildlife,
- Protecting reproductive and nursery areas, and
- Protecting wildlife corridors.

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use (LARWQCB, 1995)

<i>Evaluation Guideline:</i>	ERM of 270 ug/g (Long et al., 1995).
<i>Data Used to Assess Water Quality:</i>	Data set from 2002 has 122 core samples; 1992-1997 data set has 41 samples. Of the 163 measurements, 103 exceed the sediment quality guideline (LARWQCB and CCC, 2004).
<i>Spatial Representation:</i>	Samples were collected throughout the water body.
<i>Temporal Representation:</i>	Samples collected from 1992 through 1997 and in 2002.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan (Stephenson et al., 1994) Contaminated Sediments Task Force Database.

<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by: <ul style="list-style-type: none"> <li>-Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally,</li> <li>-Protecting food supplies for fish and wildlife,</li> <li>-Protecting reproductive and nursery areas, and</li> <li>-Protecting wildlife corridors.</li> </ul> (LARWQCB, 1995).
<i>Evaluation Guideline:</i>	Significant toxicity as compared to control conditions.
<i>Data Used to Assess Water Quality:</i>	Thirteen of 17 samples were significantly toxic (Anderson et al., 1998).
<i>Spatial Representation:</i>	Samples were collected throughout the estuary.
<i>Temporal Representation:</i>	Samples were collected in 1994 and 1996.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan (Stephenson et al., 1994).

<b><i>Numeric Line of Evidence</i></b>	Population/Community Degradation
<i>Beneficial Use:</i>	MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:

- Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally,
- Protecting food supplies for fish and wildlife,
- Protecting reproductive and nursery areas, and
- Protecting wildlife corridors.

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use (LARWQCB, 1995)

<i>Evaluation Guideline:</i>	Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community (Anderson et al., 1998).
<i>Data Used to Assess Water Quality:</i>	Eleven samples are available with 5 exhibiting degraded conditions and 6 with transitional community characteristics (Anderson et al., 1998).
<i>Spatial Representation:</i>	The samples were collected throughout the water body.
<i>Temporal Representation:</i>	Samples were collected in 1992 and 1996.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan (Stephenson et al., 1994)

<b><i>Line of Evidence</i></b>	Remedial Program in Place
<i>Beneficial Use</i>	MA - Marine Habitat
<i>Information Used to Assess Water Quality:</i>	The Consolidated Toxic Hot Spots Cleanup Plan describes how the Los Angeles Contaminated Task Force will develop a plan for the cleanup of this site. While the planning has progressed, no remediation of the site has occurred. No responsible parties have been identified.

## Region 4

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**Water Segment:** Los Angeles Harbor - Consolidated Slip

**Pollutant:** DDT

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.4 of the Listing Policy. Under section 4.4 a single line of evidence is necessary to assess delisting status.

Three lines of evidence are available in the administrative record to assess this pollutant. Tissue data was used to place this water body pollutant on the 2002 list. There is also an OEHHA fish consumption advisory established in this water body segment. Under section 4.4 of the Listing Policy any water body segment where a health advisory against consumption of edible resident organisms has been removed and the chemical or biological contaminant specific evaluation guideline for tissue is no longer exceeded shall be removed from the section 303(d) list.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of not removing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that an OEHHA fish consumption advisory has been established for this pollutant and the water segment specific data indicates that the 100 ug/kg evaluation guideline for tissue was exceeded once. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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***Numeric Line of Evidence*** Pollutant-Sediment

***Beneficial Use:*** MA - Marine Habitat

***Matrix:*** Sediment

***Water Quality Objective/  
Water Quality Criterion:*** Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use (LARWQCB, 1995)

***Evaluation Guideline:*** No sediment quality guideline is available for this pollutant that satisfies the requirements of section 6.1.3 of the Listing Policy (LARWQCB and CCC, 2004).

*Data Used to Assess Water Quality:* One-hundred and sixty-two samples are available.

*Spatial Representation:* The samples are spread throughout the water body.

*Temporal Representation:* The samples were collected between 1992 and 1997.

*Data Quality Assessment:* Bay Protection and Toxic Cleanup Program (Stephenson et al., 1994) Contaminated Sediments Task Force Database.

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***Numeric Line of Evidence*** Pollutant-Tissue

*Beneficial Use:* MA - Marine Habitat

*Matrix:* Tissue

*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health (LARWQCB, 1995)

*Evaluation Guideline:* An OEHHA screening value of 100 ug/kg was used.

*Data Used to Assess Water Quality:* The guideline is exceeded in one of the 12 measurements. The original listing was based on exceeding background levels rather than valid assessment guidelines (SMWP, 2004).

*Spatial Representation:* One station.

*Temporal Representation:* Samples were collected from 1992 through 2003.

*Data Quality Assessment:* State Mussel Watch Program.

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***Line of Evidence*** Health Advisories

*Beneficial Use* MA - Marine Habitat

*Information Used to Assess Water Quality:* A fish consumption advisory has been established for the DDT in the Los Angeles/Long Beach Harbor area. The advisory was established by the Office of Environmental Health Hazard Assessment.

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## Region 4

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**Water Segment:** Los Angeles Harbor - Consolidated Slip

**Pollutant:** Lead

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for delisting under sections 4.6 of the Listing Policy. Under section 4.6 two lines of evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, there is known significant toxicity and bioassessment data associated with this pollutant and the number of pollutant exceedances exceed the frequency allowed by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of not removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies, with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Twenty-two of 41 samples taken between 1992 and 1997 and 77 of 122 samples taken in 2002 exceeded the 112.18 ug/g Effects Range Medium sediment guideline, There is known significant toxicity data and benthic community impacts associated with the water body segment, and pollutant concentrations exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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*Numeric Line of Evidence*

Pollutant-Sediment

*Beneficial Use:*

MA - Marine Habitat

*Matrix:*

Sediment

*Water Quality Objective/  
Water Quality Criterion:*

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use (LARWQCB, 1995)

*Evaluation Guideline:*

A probable Effects Level of 112.18 ug/g was used (MacDonald et al., 1996).

*Data Used to Assess Water Quality:* Data set from 2002: 77 of 122 core and grab samples exceed the sediment guideline . Data from 1992-1997: 22 of 41 core and grab samples exceed the sediment guideline (LARWQCB and CCC, 2004).

*Spatial Representation:* The 163 samples are spread throughout the water body.

*Temporal Representation:* Samples were collected from 1992 to 1997 and in 2002.

*Data Quality Assessment:* Bay Protection and Toxic Cleanup Program (Stephenson et al. 1994) Contaminated Sediments Task Force Database.

***Numeric Line of Evidence*** Toxicity

*Beneficial Use:* MA - Marine Habitat

*Matrix:* Sediment

*Water Quality Objective/ Water Quality Criterion:* Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:

- Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally,
- Protecting food supplies for fish and wildlife,
- Protecting reproductive and nursery areas, and
- Protecting wildlife corridors.

(LARWQCB, 1995).

*Evaluation Guideline:* Significant toxicity as compared to control conditions.

*Data Used to Assess Water Quality:* Thirteen of 17 samples were significantly toxic (Anderson et al., 1998).

*Spatial Representation:* Samples were collected throughout the estuary.

*Temporal Representation:* Samples were collected in 1994 and 1996.

*Data Quality Assessment:* BPTCP Quality Assurance Project Plan (Stephenson et al., 1994).

***Numeric Line of Evidence*** Population/Community Degradation

*Beneficial Use:* MA - Marine Habitat

*Matrix:* Sediment

*Water Quality Objective/ Water Quality Criterion:* Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:

- Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally,
- Protecting food supplies for fish and wildlife,
- Protecting reproductive and nursery areas, and
- Protecting wildlife corridors.

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use (LARWQCB, 1995)

*Evaluation Guideline:* Evaluation of the benthic data were completed using the approaches developed

by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community (Anderson et al., 1998).

*Data Used to Assess Water Quality:*

Eleven samples are available with 5 exhibiting degraded conditions and 6 with transitional community characteristics (Anderson et al., 1998).

*Spatial Representation:*

The samples were collected throughout the water body.

*Temporal Representation:*

Samples were collected in 1992 and 1996.

*Data Quality Assessment:*

BPTCP Quality Assurance Project Plan (Stephenson et al., 1994)

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## Region 4

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**Water Segment:** Los Angeles Harbor - Consolidated Slip

**Pollutant:** Mercury

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under sections 4.6 and 4.9 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess delisting status while under section 4.9, a minimum of two lines of evidence are needed to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant sediment toxicity and the pollutant concentration exceeds the sediment guideline. The benthic community is impacted.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Two of 20 samples exceeded the 2.1 ug/g mercury sediment guideline, 8 samples exhibit toxicity, and 4 sediment stations had a degraded benthic community. The four lines of evidence show that the water body segment exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. The benthic community in this water body is impacted and this pollutant is associated with this impact.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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*Numeric Line of Evidence* Pollutant-Sediment

*Beneficial Use:* MA - Marine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use

	(LARWQCB, 1995)
<i>Evaluation Guideline:</i>	Sediment Quality Guideline: 2.1 ug/g (PTI Environmental Services, 1991).
<i>Data Used to Assess Water Quality:</i>	Data set from 2002 has 122 samples and the data from 1992 through 1997 has 33 samples (cores and grabs). Twenty-three measures exceed the sediment guideline in 155 samples (LARWQCB and CCC, 2004).
<i>Spatial Representation:</i>	Samples were collected throughout the water body.
<i>Temporal Representation:</i>	Samples were collected between 1992 and 2002.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan (Stephenson et al., 1994) Contaminated Sediments Task Force Database.

<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:  -Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally, -Protecting food supplies for fish and wildlife, -Protecting reproductive and nursery areas, and -Protecting wildlife corridors. (LARWQCB, 1995).
<i>Evaluation Guideline:</i>	Significant toxicity as compared to control conditions.
<i>Data Used to Assess Water Quality:</i>	Thirteen of 17 samples were significantly toxic (Anderson et al., 1998).
<i>Spatial Representation:</i>	Samples were collected throughout the estuary.
<i>Temporal Representation:</i>	Samples were collected in 1994 and 1996.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan (Stephenson et al., 1994).

<b><i>Numeric Line of Evidence</i></b>	Population/Community Degradation
<i>Beneficial Use:</i>	MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:  -Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally, -Protecting food supplies for fish and wildlife, -Protecting reproductive and nursery areas, and -Protecting wildlife corridors.  Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use

(LARWQCB, 1995)

<i>Evaluation Guideline:</i>	Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community (Anderson et al., 1998).
<i>Data Used to Assess Water Quality:</i>	Eleven samples are available with 5 exhibiting degraded conditions and 6 with transitional community characteristics (Anderson et al., 1998).
<i>Spatial Representation:</i>	The samples were collected throughout the water body.
<i>Temporal Representation:</i>	Samples were collected in 1992 and 1996.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan (Stephenson et al., 1994)

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<b><i>Line of Evidence</i></b>	Remedial Program in Place
<i>Beneficial Use</i>	MA - Marine Habitat
<i>Information Used to Assess Water Quality:</i>	The Consolidated Toxic Hot Spots Cleanup Plan describes how the Los Angeles Contaminated Sediment Task Force will develop a plan for the cleanup of this site. While the planning has progressed, no remediation of the site has occurred. No responsible parties have been identified.

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## Region 4

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**Water Segment:** Los Angeles Harbor - Consolidated Slip

**Pollutant:** Polychlorinated biphenyls

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under sections 4.4, 4.5, and 4.6 of the Listing Policy. Under section 4.4 and 4.5 a single line of evidence is necessary to assess delisting status while under section 4.6, a minimum of two lines of evidence are needed to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. There is a PCB fish consumption health advisory established for the Los Angeles/ Long Beach harbor area. Tissue data shows exceedances of the OEHHA tissue guidelines, sediment core samples taken between 1992 and 2002 exceed PCBs sediment guidelines and significant sediment toxicity has been documented in the segment. In addition, the benthic community is impacted as well.

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

This conclusion is based on the staff findings that:

1. The tissue and sediment quality guidelines used comply with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Eighty-eight of 161 samples exceeded the 400 ng/g sediment guideline, 13 of 17 samples exhibit toxicity. Twelve of 12 tissue samples exceeded the 20 ug/kg OEHHA tissue guidelines. All of these exceedances surpass the allowable frequency listed in Table 4.1 of the Listing Policy. There is a PCB fish consumption health advisory established for the Los Angeles/ Long Beach harbor area and the benthic community in this water body is impacted.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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*Numeric Line of Evidence* Toxicity

*Beneficial Use:* MA - Marine Habitat

*Matrix:* Sediment

<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:  -Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally, -Protecting food supplies for fish and wildlife, -Protecting reproductive and nursery areas, and -Protecting wildlife corridors. (LARWQCB, 1995).
<i>Evaluation Guideline:</i>	Significant toxicity as compared to control conditions.
<i>Data Used to Assess Water Quality:</i>	Thirteen of 17 samples were significantly toxic (Anderson et al., 1998).
<i>Spatial Representation:</i>	Samples were collected throughout the estuary.
<i>Temporal Representation:</i>	Samples were collected in 1994 and 1996.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan (Stephenson et al., 1994).

<b><i>Numeric Line of Evidence</i></b>	Population/Community Degradation
<i>Beneficial Use:</i>	MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:  -Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally, -Protecting food supplies for fish and wildlife, -Protecting reproductive and nursery areas, and -Protecting wildlife corridors.  Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use (LARWQCB, 1995)
<i>Evaluation Guideline:</i>	Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community (Anderson et al., 1998).
<i>Data Used to Assess Water Quality:</i>	Eleven samples are available with 5 exhibiting degraded conditions and 6 with transitional community characteristics (Anderson et al., 1998).
<i>Spatial Representation:</i>	The samples were collected throughout the water body.
<i>Temporal Representation:</i>	Samples were collected in 1992 and 1996.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan (Stephenson et al., 1994)

<b><i>Numeric Line of Evidence</i></b>	Pollutant-Tissue
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*Beneficial Use:* CM - Commercial and Sport Fishing (CA), MA - Marine Habitat  
*Matrix:* Tissue  
*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health (LARWQCB, 1995)  
*Evaluation Guideline:* An OEHHA tissue guideline of 20 ug/kg was used (Brodberg & Pollack, 1999)  
*Data Used to Assess Water Quality:* The tissue guideline is exceeded in 12 of 12 measurements (SMWP, 2004).  
*Spatial Representation:* One station.  
*Temporal Representation:* Samples were collected between 1992 and 2003.  
*Data Quality Assessment:* State Mussel Watch Program.

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***Numeric Line of Evidence*** Pollutant-Sediment  
*Beneficial Use:* CM - Commercial and Sport Fishing (CA), MA - Marine Habitat  
*Matrix:* Sediment  
*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use (LARWQCB, 1995)  
*Evaluation Guideline:* A sediment quality guideline of 400 ng/g was used (MacDonald et al., 2000).  
*Data Used to Assess Water Quality:* Of the 161 core and grab samples, 88 exceed the guideline (LARWQCB and CCC, 2004).  
*Spatial Representation:* The samples are spread throughout the water body.  
*Temporal Representation:* Samples were collected between 1992 and 2002.  
*Data Quality Assessment:* Bay Protection and Toxic Cleanup Program (Stephenson et al., 1994) Contaminated Sediments Task Force Database.

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***Line of Evidence*** Health Advisories  
*Beneficial Use* CM - Commercial and Sport Fishing (CA), MA - Marine Habitat  
*Information Used to Assess Water Quality:* A fish consumption advisory has been established for PCBs in the Los Angeles/Long Beach Harbor area. The advisory was established by the Office of Environmental Health Hazard Assessment.

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## Region 4

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**Water Segment:** Los Angeles Harbor - Consolidated Slip

**Pollutant:** Toxaphene

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.5 of the Listing Policy. Under section 4.5 a single line of evidence is necessary to assess delisting status.

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

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification 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. Five of 12 samples exceeded the 30 ug/kg OEHHA tissue guideline but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

**Lines of Evidence:**

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	MA - Marine Habitat
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health (LARWQCB, 1995)
<i>Evaluation Guideline:</i>	An OEHHA tissue guideline of 30 ug/kg was used (Brodberg and Pollock, 1999).
<i>Data Used to Assess Water Quality:</i>	Five measurements of 12 total measurements exceed the tissue guideline (SMWP, 2004).

*Spatial Representation:* One station.  
*Temporal Representation:* One sample per year from 1992 through 2003.  
*Data Quality Assessment:* State Mussel Watch Program.

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## Region 4

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**Water Segment:** Los Angeles Harbor - Consolidated Slip

**Pollutant:** Zinc

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for delisting under sections 4.6 of the Listing Policy. Under section 4.6 two lines of evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, there is known significant toxicity and bioassessment data associated with this pollutant and the number of pollutant exceedances exceed the frequency allowed by the Listing Policy.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies, with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Thirty of 41 samples taken between 1992 and 1997 and 76 of 122 samples taken in 2002 exceeded the 410 ug/g Effects Range Medium sediment guideline. There is known significant toxicity data and benthic community impacts associated with the water body segment, and pollutant concentrations exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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*Numeric Line of Evidence* Toxicity

*Beneficial Use:* MA - Marine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:

-Maintaining substrate characteristics necessary to support flora and fauna which

would be present naturally,  
 -Protecting food supplies for fish and wildlife,  
 -Protecting reproductive and nursery areas, and  
 -Protecting wildlife corridors.  
 (LARWQCB, 1995).

*Evaluation Guideline:* Significant toxicity as compared to control conditions.  
*Data Used to Assess Water Quality:* Thirteen of 17 samples were significantly toxic (Anderson et al., 1998).  
*Spatial Representation:* Samples were collected throughout the estuary.  
*Temporal Representation:* Samples were collected in 1994 and 1996.  
*Data Quality Assessment:* BPTCP Quality Assurance Project Plan (Stephenson et al., 1994).

***Numeric Line of Evidence*** Population/Community Degradation  
*Beneficial Use:* MA - Marine Habitat  
*Matrix:* Sediment  
*Water Quality Objective/  
 Water Quality Criterion:* Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:  
 -Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally,  
 -Protecting food supplies for fish and wildlife,  
 -Protecting reproductive and nursery areas, and  
 -Protecting wildlife corridors.  
 Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use (LARWQCB, 1995)

*Evaluation Guideline:* Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community (Anderson et al., 1998).  
*Data Used to Assess Water Quality:* Eleven samples are available with 5 exhibiting degraded conditions and 6 with transitional community characteristics (Anderson et al., 1998).  
*Spatial Representation:* The samples were collected throughout the water body.  
*Temporal Representation:* Samples were collected in 1992 and 1996.  
*Data Quality Assessment:* BPTCP Quality Assurance Project Plan (Stephenson et al., 1994)

***Numeric Line of Evidence*** Pollutant-Sediment  
*Beneficial Use:* MA - Marine Habitat  
*Matrix:* Sediment  
*Water Quality Objective/* Basin Plan: Surface waters shall not contain concentrations of chemical

<i>Water Quality Criterion:</i>	constituents in amounts that adversely affect any designated beneficial use (LARWQCB, 1995)
<i>Evaluation Guideline:</i>	An Effects Range-Median of 410 ug/g was used (Long et al., 1995).
<i>Data Used to Assess Water Quality:</i>	From the 2002 data set, 76 of 122 core and grab samples exceed the sediment guideline. For the 1992-1997 data set, 30 of 41 core and grab samples exceed the sediment guideline (LARWQCB and CCC, 2004).
<i>Spatial Representation:</i>	The 163 samples are spread throughout the water body.
<i>Temporal Representation:</i>	Samples were collected between 1992 and 1997 and in 2002.
<i>Data Quality Assessment:</i>	Bay Protection and Toxic Cleanup Program. Contaminated Sediments Task Force Database.

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## Region 4

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**Water Segment:** Los Angeles Harbor - Fish Harbor

**Pollutant:** DDT

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.4 of the Listing Policy. Under section 4.4 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. There is an OEHHA fish consumption advisory in place for the Los Angeles/Long Beach Harbor area. There is no new information indicating that this health advisory has been removed or not applicable to this specific water segment. There is also no sediment quality guideline available to assess exceedances of DDT in sediment that complies with the requirements of section 6.1.3 of the Listing Policy. Under section 4.4 of the Listing Policy any water body segment where a health advisory against consumption of edible resident organisms has been removed or the chemical or biological contaminant-specific evaluation guideline for tissue is no longer exceeded shall be removed from the section 303(d) list. In this case, there are no current tissue data available for evaluation, it is unknown whether pollutant concentrations exceed sediment quality guidelines, and in the absence of more current information, a health advisory remains in place and is applicable to this water body segment.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of not removing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that although there are no current tissue data available for evaluation, and it is not possible to determine any exceedances of sediment quality guideline, an OEHHA fish consumption advisory remains in place 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Sediment
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/</i>	Basin Plan: Surface waters shall not contain concentrations of chemical

<i>Water Quality Criterion:</i>	constituents in amounts that adversely affect any designated beneficial use.
<i>Evaluation Guideline:</i>	No sediment quality guideline is available that complies with the requirements of section 6.1.3 of the Listing Policy.
<i>Data Used to Assess Water Quality:</i>	Twelve core and grab samples are available (LARWQCB and CCC, 2004).
<i>Spatial Representation:</i>	The samples are spread throughout the water body.
<i>Temporal Representation:</i>	The samples were collected in 1992 and 1999.
<i>Data Quality Assessment:</i>	Bay Protection and Toxic Cleanup Program QAPP. Quality assurance for other samples presented in the Contaminated Sediments Task Force Database.

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<b><i>Line of Evidence</i></b>	Health Advisories
<i>Beneficial Use</i>	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat
<i>Information Used to Assess Water Quality:</i>	A fish consumption advisory has been established for the DDT in the Los Angeles/Long Beach Harbor area. The advisory was established by the Office of Environmental Health Hazard Assessment.

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## Region 4

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**Water Segment:** Los Angeles Harbor - Fish Harbor

**Pollutant:** Polychlorinated biphenyls

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.4 of the Listing Policy. Under section 4.4 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. There is an OEHHA fish consumption advisory in place for the Los Angeles/Long Beach Harbor area. There is no new information indicating that this health advisory has been removed or not applicable to this specific water segment. Although there are no current tissue data for evaluation, a sufficient number of samples exceeded sediment quality guidelines. Under section 4.4 of the Listing Policy any water body segment where a health advisory against consumption of edible resident organisms has been removed or the chemical or biological contaminant-specific evaluation guideline for tissue is no longer exceeded shall be removed from the section 303(d) list. In this case, there are no current tissue data available for evaluation, but pollutant concentrations exceed sediment quality guidelines and in the absence of more current information, a health advisory remains in place that is applicable to this water body segment.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of not removing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that an OEHHA fish consumption advisory is in place for this pollutant and six of 13 sediment samples exceeded the 400 ug/l PCB sediment quality evaluation guideline. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### **Lines of Evidence:**

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<i>Numeric Line of Evidence</i>	Pollutant-Sediment
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/</i>	Basin Plan: Surface waters shall not contain concentrations of chemical

<i>Water Quality Criterion:</i>	constituents in amounts that adversely affect any designated beneficial use.
<i>Evaluation Guideline:</i>	A sediment quality guideline of 400 ng/g was used (MacDonald et al., 2000).
<i>Data Used to Assess Water Quality:</i>	Of the 13 samples available, 6 measurements exceeded the sediment quality guideline (LARWQCB and CCC, 2004).
<i>Spatial Representation:</i>	The samples are spread throughout the water body.
<i>Temporal Representation:</i>	The samples were collected in 1992, 1995, and 1999. All of the exceedances occurred in 1999.
<i>Data Quality Assessment:</i>	Bay Protection and Toxic Cleanup Program QAPP. Quality assurance for other samples presented in the Contaminated Sediments Task Force Database.

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<b><i>Line of Evidence</i></b>	Health Advisories
<i>Beneficial Use</i>	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat
<i>Information Used to Assess Water Quality:</i>	A fish consumption advisory has been established for the PCB in the Los Angeles/Long Beach Harbor area. The advisory was established by the Office of Environmental Health Hazard Assessment.

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## Region 4

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<b>Water Segment:</b>	Los Angeles Harbor - Fish Harbor
<b>Pollutant:</b>	Polycyclic Aromatic Hydrocarbons (PAHs) (Aquatic Ecosystems)
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for delisting under sections 4.6 of the Listing Policy. Under section 4.6 two lines of evidence are necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, a sufficient number of samples exceed the 1,442 ng/l low molecular and the 9,600 ng/l high molecular weight PAH sediment quality guidelines. The numbers of pollutant exceedances exceed the frequency allowed by the Listing Policy. However, water body segment exhibited non-significant sediment toxicity and it cannot be determined whether any toxic effects are associated with these pollutant concentrations</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of not removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The sediment quality guideline used complies, with the requirements of section 6.1.3 of the Policy.</li><li>2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>4. Five of 12 samples exceeded the 1,442 ng/l low molecular weight and 6 of 12 exceeded 9,600 ng/l high molecular weight PAH sediment quality guideline. The pollutant concentrations exceed the allowable frequency listed in Table 4.1 of the Listing Policy. Recorded toxicity for this water body segment is not significant</li><li>5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.
<b>Lines of Evidence:</b>	

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<i>Numeric Line of Evidence</i>	Pollutant-Sediment
<i>Beneficial Use:</i>	MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use.
<i>Evaluation Guideline:</i>	Sediment quality guidelines were used as follows: 1,800 ug/g for total PAHs



	(Fairey et al., 2001), 1,442 ng/g for low molecular weight PAHs (MacDonald et al., 1996), and 9,600 ng/g for high molecular weight PAHs (Long et al., 1995).
<i>Data Used to Assess Water Quality:</i>	Of the 12 sediment core and grab samples: none exceeded the total PAH sediment quality guideline, 5 measurements exceeded the low molecular weight PAH guideline, and 6 measurements exceeded the high molecular weight PAH guideline (LARWQCB and CCC, 2004).
<i>Spatial Representation:</i>	The samples were spread throughout the water body.
<i>Temporal Representation:</i>	Samples were collected in 1992 and 1999.
<i>Data Quality Assessment:</i>	Bay Protection and Toxic Cleanup Program QAPP. Quality assurance for other samples presented in the Contaminated Sediments Task Force Database.

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<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use.
<i>Evaluation Guideline:</i>	Samples were considered toxic if (1) there was a significant difference in mean organism response between the sample and the control, and (2) the mean organism response in the test, as a percent of the control, was less than the threshold based on the 90th percentile minimum significant difference value.
<i>Data Used to Assess Water Quality:</i>	Of the 6 samples collected, one sample was considered toxic to amphipods (Anderson, et al., 1998).
<i>Spatial Representation:</i>	Three samples were collected at the entrance to Fish Harbor.
<i>Temporal Representation:</i>	The samples were collected in 1992.
<i>Data Quality Assessment:</i>	Bay Protection and Toxic Cleanup Program QAPP.

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## Region 4

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**Water Segment:** Los Angeles River Estuary (Queensway Bay)

**Pollutant:** Chlordane

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for delisting under sections 4.6 of the Listing Policy. Under section 4.6 two lines of evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, there is known significant toxicity and bioassessment data associated with this water body segment and pollutant sediment concentrations exceed sediment guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of not removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies, with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. There is significant toxicity and bioassessment data are associated with this water body segment, and nine of 9 sediment samples taken exceeded the sediment guidelines. There is an insufficient total number of samples to allow removal of this water body pollutant combination from the list using the frequencies presented in Table 4.1 of the Listing Policy.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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*Numeric Line of Evidence*

Pollutant-Sediment

*Beneficial Use:*

ES - Estuarine Habitat

*Matrix:*

Sediment

*Water Quality Objective/  
Water Quality Criterion:*

Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:

-Maintaining substrate characteristics necessary to support flora and fauna which

would be present naturally,  
-Protecting food supplies for fish and wildlife,  
-Protecting reproductive and nursery areas, and  
-Protecting wildlife corridors.

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use.

*Evaluation Guideline:* ERM: 6 ng/g (Long and Morgan, 1990)  
*Data Used to Assess Water Quality:* Nine samples, 9 samples exceeding (Anderson et al., 1998).  
*Spatial Representation:* Samples were collected synoptically with toxicity samples.  
*Temporal Representation:* Samples taken in 2 different years.  
*Data Quality Assessment:* BPTCP Quality Assurance Project Plan.

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***Numeric Line of Evidence*** Toxicity

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:

-Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally,  
-Protecting food supplies for fish and wildlife,  
-Protecting reproductive and nursery areas, and  
-Protecting wildlife corridors.

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use.

*Evaluation Guideline:* BPTCP reference envelope approach used.  
*Data Used to Assess Water Quality:* Four of six sediment samples were found to be significantly toxic to amphipods (Anderson et al., 1998).  
*Spatial Representation:* Samples were collected synoptically with sediment samples.  
*Temporal Representation:* Samples taken in 2 different years.  
*Data Quality Assessment:* BPTCP Quality Assurance Project Plan.

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***Numeric Line of Evidence*** Population/Community Degradation

*Beneficial Use:* ES - Estuarine Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:

-Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally,

- Protecting food supplies for fish and wildlife,
- Protecting reproductive and nursery areas, and
- Protecting wildlife corridors.

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use.

*Evaluation Guideline:*

Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community.

*Data Used to Assess Water Quality:*

The benthic community was classified as transitional (Anderson et al., 1998).

*Spatial Representation:*

Samples were collected synoptically with sediment and toxicity data.

*Temporal Representation:*

Samples taken in 2 different years.

*Data Quality Assessment:*

BPTCP

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## Region 4

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**Water Segment:** Los Angeles River Estuary (Queensway Bay)

**Pollutant:** Lead

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for delisting under sections 4.6 of the Listing Policy. Under section 4.6 two lines of evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, there is known significant toxicity and bioassessment data associated with this water body segment and pollutant sediment concentrations exceed sediment guidelines.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies, with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. There is significant toxicity and bioassessment data are associated with this water body segment, and five of 27 sediment samples taken exceeded the sediment guidelines. There are insufficient total numbers of samples to allow removal of this water body pollutant combination from the list using the frequencies presented in Table 4.1 of the Listing Policy.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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*Numeric Line of Evidence*

Pollutant-Sediment

*Beneficial Use:*

ES - Estuarine Habitat

*Matrix:*

Sediment

*Water Quality Objective/  
Water Quality Criterion:*

Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:

-Maintaining substrate characteristics necessary to support flora and fauna which

would be present naturally,  
-Protecting food supplies for fish and wildlife,  
-Protecting reproductive and nursery areas, and  
-Protecting wildlife corridors.

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use.

*Evaluation Guideline:* PEL: 112.18 ug/g (McDonald et al., 1996).  
*Data Used to Assess Water Quality:* Twenty-seven samples, 5 samples exceeding (Anderson et al., 1998).  
*Spatial Representation:* Samples were collected synoptically with toxicity samples.  
*Temporal Representation:* Samples taken in three different years.  
*Data Quality Assessment:* BPTCP Quality Assurance Project Plan.

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***Numeric Line of Evidence*** Toxicity  
*Beneficial Use:* ES - Estuarine Habitat  
*Matrix:* Sediment  
*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:  
  
-Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally,  
-Protecting food supplies for fish and wildlife,  
-Protecting reproductive and nursery areas, and  
-Protecting wildlife corridors.  
  
Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use (LARWQCB, 1995)  
*Evaluation Guideline:* BPTCP reference envelope approach used (SWRCB, 1997)  
*Data Used to Assess Water Quality:* Four of six sediment samples were found to be significantly toxic to amphipods (Anderson et al., 1998).  
*Spatial Representation:* Samples were collected synoptically with sediment samples.  
*Temporal Representation:* Samples taken in 2 different years.  
*Data Quality Assessment:* BPTCP Quality Assurance Project Plan (Stephenson et al., 1994)

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***Numeric Line of Evidence*** Population/Community Degradation  
*Beneficial Use:* ES - Estuarine Habitat  
*Matrix:* Sediment  
*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:  
  
-Maintaining substrate characteristics necessary to support flora and fauna which

would be present naturally,  
-Protecting food supplies for fish and wildlife,  
-Protecting reproductive and nursery areas, and  
-Protecting wildlife corridors.

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use (LARWQCB, 1995)

<i>Evaluation Guideline:</i>	Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community.
<i>Data Used to Assess Water Quality:</i>	The benthic community was classified as transitional (Anderson et al., 1998).
<i>Spatial Representation:</i>	Samples were collected synoptically with sediment and toxicity samples.
<i>Temporal Representation:</i>	Samples taken in 2 different years.
<i>Data Quality Assessment:</i>	BPTCP Quality Assurance Project Plan (Stephenson et al., 1994)

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## Region 4

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**Water Segment:** Los Angeles River Estuary (Queensway Bay)

**Pollutant:** Polychlorinated biphenyls

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for delisting under sections 4.6 of the Listing Policy. Under section 4.6 two lines of evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, there is known significant toxicity and bioassessment data associated with this water body segment but the number of pollutant sediment exceedances does not exceed the frequency allowed by the Listing Policy.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies, with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. There is significant toxicity data and bioassessment data are associated with this water body segment. None of the 18 sediment samples taken exceeded the sediment guidelines but the number of samples is insufficient to delist pursuant to the Listing Policy.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

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

### Lines of Evidence:

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*Numeric Line of Evidence*

Pollutant-Sediment

*Beneficial Use:*

ES - Estuarine Habitat

*Matrix:*

Sediment

*Water Quality Objective/  
Water Quality Criterion:*

Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:

-Maintaining substrate characteristics necessary to support flora and fauna which



would be present naturally,  
-Protecting food supplies for fish and wildlife,  
-Protecting reproductive and nursery areas, and  
-Protecting wildlife corridors.

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use (LARWQCB, 1995)

*Evaluation Guideline:* Sediment guideline of 400 ng/g used (MacDonald et al., 2000).  
*Data Used to Assess Water Quality:* Eighteen samples with no samples exceeding (Anderson et al., 1998).  
*Spatial Representation:* Samples were collected synoptically with toxicity samples.  
*Temporal Representation:* Samples taken in 2 different years.  
*Data Quality Assessment:* BPTCP Quality Assurance Project Plan (Stephenson et al., 1994)

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***Numeric Line of Evidence*** Toxicity  
*Beneficial Use:* ES - Estuarine Habitat  
*Matrix:* Sediment  
*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:  
  
-Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally,  
-Protecting food supplies for fish and wildlife,  
-Protecting reproductive and nursery areas, and  
-Protecting wildlife corridors.

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use.  
*Evaluation Guideline:* BPTCP reference envelope approach used (Anderson et al., 1998)  
*Data Used to Assess Water Quality:* Four out of six sediment samples were found to be significantly toxic to amphipods (Anderson, et al., 1998).  
*Spatial Representation:* Samples were collected synoptically with sediment samples.  
*Temporal Representation:* Samples taken in 2 different years.  
*Data Quality Assessment:* BPTCP Quality Assurance Project Plan (Stephenson et al., 1994).

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***Numeric Line of Evidence*** Population/Community Degradation  
*Beneficial Use:* ES - Estuarine Habitat  
*Matrix:* Sediment  
*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:  
  
-Maintaining substrate characteristics necessary to support flora and fauna which

- would be present naturally,
- Protecting food supplies for fish and wildlife,
- Protecting reproductive and nursery areas, and
- Protecting wildlife corridors.

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use.

*Evaluation Guideline:*

Evaluation of the benthic data were completed using the approaches developed by scientists associated with the BPTCP. The relative benthic index used is a calculated value considering the total fauna, total mollusk species, crustacean species and indicator species at a site. The index ranges from 0 to 1.0. An index value of less than or equal to 0.3 is an indication that pollutants or other factors are negatively impacting the benthic community (Anderson et al., 1998).

*Data Used to Assess Water Quality:*

The benthic community was classified as transitional (Anderson et al., 1998).

*Spatial Representation:*

Samples were collected synoptically with sediment and toxicity samples.

*Temporal Representation:*

Samples taken in 2 different years.

*Data Quality Assessment:*

BPTCP Quality Assurance Project Plan (Stephenson et al., 1994)

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## Region 4

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**Water Segment:** Los Angeles River Reach 1 (Estuary to Carson Street)

**Pollutant:** Ammonia

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* WA - Warm Freshwater Habitat

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004.

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## Region 4

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**Water Segment:** Los Angeles River Reach 1 (Estuary to Carson Street)

**Pollutant:** Copper

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. This data set was probably used to place the water body - pollutant combination on the 2002 303(d) list originally. A sufficient number of samples exceed the acute and chronic CTR Criteria for the protection of aquatic life.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 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 18 samples exceeded the CTR - CMC acute criterion, and 13 of 18 samples exceeded the CTR- CCC chronic criterion and this exceeds 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 not be removed from 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:

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***Numeric Line of Evidence*** Pollutant-Water

***Beneficial Use:*** WA - Warm Freshwater Habitat, WI - Wildlife Habitat

***Matrix:*** Water

***Water Quality Objective/  
Water Quality Criterion:*** CTRs are applicable to Aquatic Life.

***Data Used to Assess Water  
Quality:*** Eighteen water samples, 11 samples exceeding (acute), 13 samples exceeding (chronic) (LACDWP, 2004c).

***Spatial Representation:*** Samples were collected mostly in main stem of Los Angeles River.

***Temporal Representation:*** Fall, winter, spring (1997-1999).

*Environmental Conditions:* Data 2-5 years old, data measured in water body, sample taken different seasons and years.

*QA/QC Equivalent:* Los Angeles County Stormwater Program

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## Region 4

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**Water Segment:** Los Angeles River Reach 1 (Estuary to Carson Street)

**Pollutant:** Zinc

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. This data set was probably used to place the water body - pollutant combination on the 2002 303(d) list originally. A sufficient number of samples exceed the acute and chronic CTR Criteria for the protection of aquatic life.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 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 18 samples exceeded the CTR - CMC acute criterion, and 7 of 18 samples exceeded the CTR- CCC chronic criterion and this exceeds 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 not be removed from 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:

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***Numeric Line of Evidence*** Pollutant-Water

***Beneficial Use:*** ES - Estuarine Habitat, MA - Marine Habitat, MI - Fish Migration, MU - Municipal & Domestic, RA - Rare & Endangered Species, SA - Saline Water Habitat, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

***Matrix:*** Water

***Water Quality Objective/  
Water Quality Criterion:*** CTRs are applicable to Aquatic Life.

***Data Used to Assess Water Quality:*** Eighteen water samples, 7 samples exceeding (acute and chronic criteria) (LACDPW, 2003).

*Spatial Representation:* Samples were collected mainly in the main stem of the LA River.

*Temporal Representation:* Fall, winter in different years.

*Environmental Conditions:* Data 2-5 years old, data measured in water body, sample taken different seasons and years.

*QA/QC Equivalent:* Los Angeles County Stormwater Program

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## Region 4

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**Water Segment:** Los Angeles River Reach 1 (Estuary to Carson Street)

**Pollutant:** pH

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. It is unknown if the nutrients (algae), foam, and odor information backed by pollutant data. The nutrients (algae), foam, and odor information should not be placed on the section 303(d) list because is not a pollutant or toxicity (section 2 of the Listing Policy).

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* WA - Warm Freshwater Habitat

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004.

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## Region 4

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**Water Segment:** Los Angeles River Reach 2 (Carson to Figueroa Street)

**Pollutant:** Ammonia

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* WA - Warm Freshwater Habitat

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004.

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## Region 4

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**Water Segment:** Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)

**Pollutant:** Ammonia

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The nutrient(algae), foam, and odor listings are backed by ammonia data. Nutrient(algae), foam, and odor information should not be placed on the section 303(d) list because they are not pollutants or toxicity (section 2 of the Listing Policy).

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R2 - Non-Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004.

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## Region 4

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**Water Segment:** Los Angeles River Reach 5 ( within Sepulveda Basin)

**Pollutant:** Ammonia

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The nutrient(algae), foam, and odor listings are backed by ammonia data. Nutrient(algae), foam, and odor information should not be placed on the section 303(d) list because they are not pollutants or toxicity (section 2 of the Listing Policy).

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* WA - Warm Freshwater Habitat

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004.

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## Region 4

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**Water Segment:** Los Cerritos Channel

**Pollutant:** Chlordane

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. This line of evidence was probably used to place this water body pollutant combination on the 303(d) list originally. One of the samples exceed the ERM sediment quality guidance and the number of samples is insufficient to make a delisting determination with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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 four samples exceeded the ERM sediment guideline. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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***Numeric Line of Evidence***

Pollutant-Sediment

***Beneficial Use:***

ES - Estuarine Habitat, MA - Marine Habitat, MI - Fish Migration, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat

***Matrix:***

Sediment

***Water Quality Objective/  
Water Quality Criterion:***

Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:

- Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally,
- Protecting food supplies for fish and wildlife,
- Protecting reproductive and nursery areas, and

-Protecting wildlife corridors.  
(LARWQCB, 1995)

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use.

*Evaluation Guideline:*

ERM: 6 ng/g (Long and Morgan, 1990).

*Data Used to Assess Water Quality:*

Four sediment samples with one sample exceeding the ERM (Anderson, et al., 1998).

*Spatial Representation:*

Data was collected spatially.

*Temporal Representation:*

Winter 1993 and 1994.

*Data Quality Assessment:*

BPTCP QAPP.

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## Region 4

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**Water Segment:** Machado Lake (Harbor Park Lake)

**Pollutant:** Chlordane

**Decision:** Do Not Delist

**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 insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 9 samples exceeded the OEHHA Screening Value but the number of samples is insufficient to determine with the confidence and power required by 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health
<i>Evaluation Guideline:</i>	30 ng/g (OEHHA Screening Value)
<i>Data Used to Assess Water Quality:</i>	Four out of 9 samples exceeded. A total of 9 filet composite samples of carp and largemouth bass were collected. Carp were collected in 1993-94, 1997, and 2002. Largemouth bass were collected in 1992, 1994, 1997, and 2002. The guideline was exceeded in 1993, 1994, 1997, and 2002 samples of carp. Largemouth bass did not exceed the guideline (TSMP, 2002).
<i>Spatial Representation:</i>	One station in the entire lake.
<i>Temporal Representation:</i>	Samples were collected annually 1992-94, 1997, and 2002.

*Data Quality Assessment:*

Toxic Substances Monitoring Program 1992-93 and 1994-95 Data Reports.  
Environmental Chemistry Quality Assurance and Data Report for the Toxic  
Substances Monitoring Program, 1996-2000. Department of Fish and Game  
Environmental Chemistry Quality Assurance and Data Report for the Toxic  
Substances Monitoring Program, 2001-2002. Department of Fish and Game.

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## Region 4

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**Water Segment:** Machado Lake (Harbor Park Lake)

**Pollutant:** DDT

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from 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 insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 9 samples exceeded the OEHHA Screening Value but the number of samples is insufficient to determine with the confidence and power required by 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.
<i>Evaluation Guideline:</i>	100 ng/g (OEHHA Screening Value)
<i>Data Used to Assess Water Quality:</i>	Four out of 9 samples exceeded. A total of 5 filet composite samples of largemouth bass and 4 composite filet samples of carp were collected. Largemouth bass were collected in 1992, 1994, 1997, and 2002. Carp were collected in 1993-94, 1997, and 2002. The guideline was exceeded in all carp samples. Largemouth bass did not exceed the guideline (TSMP, 2002).
<i>Spatial Representation:</i>	One station in the entire lake.
<i>Temporal Representation:</i>	Samples were collected annually 1992-94, 1997, and 2002.



*Data Quality Assessment:*

Toxic Substances Monitoring Program 1992-93 and 1994-95 Data Reports.  
Environmental Chemistry Quality Assurance and Data Report for the Toxic  
Substances Monitoring Program, 1996-2000. Department of Fish and Game  
Environmental Chemistry Quality Assurance and Data Report for the Toxic  
Substances Monitoring Program, 2001-2002. Department of Fish and Game.

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## Region 4

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**Water Segment:** Machado Lake (Harbor Park Lake)

**Pollutant:** Dieldrin

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from 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 insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 9 samples exceeded the OEHHA Screening Value but the number of samples is insufficient to determine with the confidence and power required by 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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***Numeric Line of Evidence***

Pollutant-Tissue

***Beneficial Use:***

CM - Commercial and Sport Fishing (CA)

***Matrix:***

Tissue

***Water Quality Objective/  
Water Quality Criterion:***

Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.

***Evaluation Guideline:***

2 ng/g (OEHHA Screening Value)

***Data Used to Assess Water  
Quality:***

Four out of 9 samples exceeded. A total of 5 filet composite samples of largemouth bass and 4 composite filet samples of carp were collected. Largemouth bass were collected in 1992, 1994, 1997, and 2002. Carp were collected in 1993-94, 1997, and 2002. The guideline was exceeded in all carp samples. Largemouth bass did not exceed the guideline (TSMP, 2002).

***Spatial Representation:***

One station in the entire lake.

*Temporal Representation:*

Samples were collected annually 1992-94, 1997, and 2002.

*Data Quality Assessment:*

Toxic Substances Monitoring Program 1992-93 and 1994-95 Data Reports. Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish and Game Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish and Game.

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## Region 4

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**Water Segment:** Machado Lake (Harbor Park Lake)

**Pollutant:** Polychlorinated biphenyls

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from 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 insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 9 samples exceeded the OEHHA Screening Value but the number of samples is insufficient to determine with the confidence and power required by 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.
<i>Evaluation Guideline:</i>	20 ng/g (OEHHA Screening Value)
<i>Data Used to Assess Water Quality:</i>	Four out of 9 samples exceeded. A total of 5 filet composite samples of largemouth bass and 4 filet composite samples of carp were collected. Carp were collected in 1993-94, 1997, and 2002. Largemouth bass were collected in 1992, 1994, 1997, and 2002. The guideline was exceeded in 1993, 1994, 1997, and 2002 samples of carp. Largemouth bass did not exceed the guideline (TSMP, 2002).
<i>Spatial Representation:</i>	One station in the entire lake.

*Temporal Representation:*

Samples were collected annually 1992-94, 1997, and 2002.

*Data Quality Assessment:*

Toxic Substances Monitoring Program 1992-93 and 1994-95 Data Reports.  
Environmental Chemistry Quality Assurance and Data Report for the Toxic  
Substances Monitoring Program, 1996-2000. Department of Fish and Game  
Environmental Chemistry Quality Assurance and Data Report for the Toxic  
Substances Monitoring Program, 2001-2002. Department of Fish and Game.

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## Region 4

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**Water Segment:** Malibu Lagoon

**Pollutant:** pH

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. This line of evidence was probably used to place the water body pollutant combination on the 2002 303(d) list originally. Thirty-three samples exceeded the water quality objective when the water body was listed. However, twenty-two exceedances or less would be required in order to delist the water body pollutant combination to provide the adequate confidence and power that standards are being met in accordance with the Listing Policy.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty-three of 138 samples exceeded the pH water quality objective. At least 22 samples or less are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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**Numeric Line of Evidence** Pollutant-Water

**Beneficial Use:** ES - Estuarine Habitat, MA - Marine Habitat, MI - Fish Migration, RA - Rare & Endangered Species, SP - Fish Spawning, WE - Wetland Habitat, WI - Wildlife Habitat

**Matrix:** Water

**Water Quality Objective/  
Water Quality Criterion:** Basin Plan: The pH of bays and estuaries shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges. Ambient pH levels shall not be changed more than 0.2 units from natural conditions as a result of waste

discharge.

*Data Used to Assess Water Quality:*

There were 138 water samples, with 33 samples exceeding the water quality objective (SWRCB, 2003).

*Spatial Representation:*

pH data was collected at various monitoring stations within the lagoon.

*Temporal Representation:*

Winter 1997, Summer-Winter 1998, Winter-Fall 1999.

*Data Quality Assessment:*

Las Virgenas NPDES Municipal Water District.

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## Region 4

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**Water Segment:** Malibu Lagoon Beach (Surfrider)

**Pollutant:** Coliform Bacteria

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity (section 2 of the Listing Policy).

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

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## Region 4

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**Water Segment:** Marina del Rey Harbor - Back Basins

**Pollutant:** Coliform Bacteria

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Marina del Rey Pathogens TMDL was approved by RWQCB on August 7, 2003 and subsequently approved by USEPA on March 23, 2004.

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## Region 4

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**Water Segment:** Marina del Rey Harbor - Back Basins

**Pollutant:** DDT

**Decision:** Do Not Delist

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Two out of 4 samples exceeded the OEHHA Screening Value for fish tissue. A minimum of 28 samples would be needed in order for this water body to be delisted for this pollutant with 2 exceedances.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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*Numeric Line of Evidence*

Pollutant-Sediment

*Beneficial Use:*

MA - Marine Habitat, WI - Wildlife Habitat

*Matrix:*

Sediment

*Water Quality Objective/  
Water Quality Criterion:*

Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:

- Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally,
- Protecting food supplies for fish and wildlife,
- Protecting reproductive and nursery areas, and
- Protecting wildlife corridors.

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use.

*Evaluation Guideline:*

A sediment quality guideline is not available that satisfies the conditions established in section 6.1.3 of the Listing Policy.

*Data Used to Assess Water Quality:* Ten samples ranging in concentration from 33.96 ppb to 97 ppb (Anderson, et al., 1998).

*Spatial Representation:* Samples were collected synoptically with toxicity samples.

*Temporal Representation:* Summer-winter 1993, summer 1996, fall-winter 1997.

*Data Quality Assessment:* BPTCP QAPP.

***Numeric Line of Evidence*** Pollutant-Tissue

*Beneficial Use:* MA - Marine Habitat, WI - Wildlife Habitat

*Matrix:* Tissue

*Water Quality Objective/ Water Quality Criterion:* Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.

*Evaluation Guideline:* 100 ng/g - OEHHA Screening Value.

*Data Used to Assess Water Quality:* Two out of 4 samples exceeded. A total of 3 filet composite samples of white croaker, yellowfin croaker, and round stingray along with an individual sample of sargo were collected. White croaker was collected in 1993. All others were collected in 1995. The guideline was exceeded in white croaker and sargo. Yellowfin croaker and round stingray did not exceed the guideline (TSMP, 2002).

*Spatial Representation:* One station located about midway between the boat ramp and the entrance to the ocean.

*Temporal Representation:* Samples were collected on 6/22/93 and 6/28/95.

*Data Quality Assessment:* Toxic Substances Monitoring Program 1992-93 and 1994-95 Data Reports.

***Numeric Line of Evidence*** Toxicity

*Beneficial Use:* MA - Marine Habitat, WI - Wildlife Habitat

*Matrix:* Sediment

*Water Quality Objective/ Water Quality Criterion:* Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:

- Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally,
- Protecting food supplies for fish and wildlife,
- Protecting reproductive and nursery areas, and
- Protecting wildlife corridors.

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use.

*Evaluation Guideline:* BPTCP reference envelope approach used.

*Data Used to Assess Water Quality:* Seven samples, 6 samples considered toxic (Anderson et al., 1998).

*Spatial Representation:* Samples were collected synoptically with sediment samples.

*Temporal Representation:* Summer-winter 1993, summer 1996, fall-winter 1997.  
*Data Quality Assessment:* BPTCP QAPP.

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## Region 4

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**Water Segment:** Marina del Rey Harbor - Back Basins

**Pollutant:** Dieldrin

**Decision:** Do Not Delist

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Two out of 4 samples exceeded the OEHHA Screening Value for fish tissue. A minimum of 28 samples would be needed in order for this water body to be delisted for this pollutant with 2 exceedances.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.
<i>Evaluation Guideline:</i>	2 ng/g - OEHHA Screening Value.
<i>Data Used to Assess Water Quality:</i>	Two out of 4 samples exceeded. A total of 3 filet composite samples of white croaker, yellowfin croaker, and round stingray along with an individual sample of sargo were collected. White croaker was collected in 1993. All others were collected in 1995. The guideline was exceeded in white croaker and sargo. Yellowfin croaker and round stingray did not exceed the guideline (TSMP, 2002).
<i>Spatial Representation:</i>	One station located about midway between the boat ramp and the entrance to the ocean.

*Temporal Representation:*

Samples were collected on 6/22/93 and 6/28/95.

*Data Quality Assessment:*

Toxic Substances Monitoring Program 1992-93 and 1994-95 Data Reports.

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## Region 4

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**Water Segment:** Marina del Rey Harbor - Back Basins

**Pollutant:** Polychlorinated biphenyls

**Decision:** Do Not Delist

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Three out of 4 samples exceeded the OEHHA Screening Value for fish tissue and, although none of the 18 sediment samples exceeded the criteria for PCBs, 6 samples were found to be toxic.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Tissue
<i>Beneficial Use:</i>	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.
<i>Evaluation Guideline:</i>	20 ng/g - OEHHA Screening Value.
<i>Data Used to Assess Water Quality:</i>	Three out of 4 samples exceeded. A total of 3 filet composite samples of white croaker, yellowfin croaker, and round stingray along with an individual sample of sargo were collected. White croaker was collected in 1993. All others were

collected in 1995. The guideline was exceeded in white croaker, sargo, and yellowfin croaker. Round stingray did not exceed the guideline (TSMP, 2002).

*Spatial Representation:* One station located about midway between the boat ramp and the entrance to the ocean.

*Temporal Representation:* Samples were collected on 6/22/93 and 6/28/95.

*Data Quality Assessment:* Toxic Substances Monitoring Program 1992-93 and 1994-95 Data Reports.

***Numeric Line of Evidence*** Pollutant-Sediment

*Beneficial Use:* MA - Marine Habitat, WI - Wildlife Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:

- Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally,
- Protecting food supplies for fish and wildlife,
- Protecting reproductive and nursery areas, and
- Protecting wildlife corridors.

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use.

*Evaluation Guideline:* Sediment Quality Guideline: 400 ug/g (McDonald et al., 2000).

*Data Used to Assess Water Quality:* 18 sediment samples with none exceeding the sediment quality guideline.

*Spatial Representation:* Samples were collected synoptically with toxicity samples.

*Temporal Representation:* Summer-winter 1993, summer 1996, fall-winter 1997.

*Data Quality Assessment:* BPTCP and TSMP QAPPs.

***Numeric Line of Evidence*** Toxicity

*Beneficial Use:* MA - Marine Habitat, WI - Wildlife Habitat

*Matrix:* Sediment

*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:

- Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally,
- Protecting food supplies for fish and wildlife,
- Protecting reproductive and nursery areas, and
- Protecting wildlife corridors.

Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use.

*Evaluation Guideline:* BPTCP reference envelope approach used.



*Data Used to Assess Water Quality:* Seven samples, 6 samples considered toxic (Anderson et al., 1998).

*Spatial Representation:* Samples were collected synoptically with sediment samples.

*Temporal Representation:* Summer-winter 1993, summer 1996, fall-winter 1997.

*Data Quality Assessment:* BPTCP QAPP.

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## Region 4

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**Water Segment:** Marina del Rey Harbor Beach

**Pollutant:** Coliform Bacteria

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity (section 2 of the Listing Policy).

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Marina del Rey Pathogens TMDL was approved by RWQCB on August 7, 2003 and subsequently approved by USEPA on March 23, 2004.

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Marina del Rey Pathogens TMDL was approved by RWQCB on August 7, 2003 and subsequently approved by USEPA on March 23, 2004.

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## Region 4

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**Water Segment:** McCoy Canyon Creek

**Pollutant:** Fecal Coliform

**Decision:** Do Not 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 4.2 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. This Line of evidence was probably used to place this water body pollutant combination on the 303(d) list originally. 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 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. Thirty-eight of 56 samples originally exceeded the water quality objective and this exceeds 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 not be removed from 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:**

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***Numeric Line of Evidence***

Pollutant-Water

***Beneficial Use:***

R1 - Water Contact Recreation

***Matrix:***

Water

***Water Quality Objective/  
Water Quality Criterion:***

Basin Plan: In waters designated for water contact recreation (REC-1), the fecal coliform concentration shall not exceed a log mean of 200/100 ml (based on a minimum of not less than four samples for any 30-day period), nor shall more than 10 percent of total samples during any 30-day period exceed 400/100 ml.

*Data Used to Assess Water Quality:* Fifty-six bacterial samples, 38 samples exceeding (SWRCB, 2003).

*Spatial Representation:* Samples were collected along the creek.

*Temporal Representation:* Spring, summer, fall, winter.

*Data Quality Assessment:* City of Calabasas NPDES Monitoring.

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## Region 4

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**Water Segment:** McCoy Canyon Creek

**Pollutant:** Nitrogen, Nitrate

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. This Line of evidence was probably used to place this water body pollutant combination on the 303(d) list originally 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 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. 19 of 51 samples originally exceeded the water quality objective and this exceeds 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 not be removed from 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:**

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***Numeric Line of Evidence***

Pollutant-Water

***Beneficial Use:***

GW - Groundwater Recharge

***Matrix:***

Water

***Water Quality Objective/  
Water Quality Criterion:***

Basin Plan: Waters shall not exceed 10 mg/L nitrogen as nitrate-nitrogen plus nitrite-nitrogen (NO<sub>2</sub>-N), 45 mg/L as nitrate (NO<sub>3</sub>), 10 mg/L as nitrate-nitrogen (NO<sub>3</sub>-N), or 1 mg/L nitrite-nitrogen (NO<sub>2</sub>-N) or as otherwise designated in [another part of the Basin Plan].

*Data Used to Assess Water Quality:* Fifty-one water samples, 19 samples exceeding (SWRCB, 2003).

*Spatial Representation:* Samples were collected along the creek.

*Temporal Representation:* Spring-Summer-Fall 2000 and Winter-Spring 2001.

*Data Quality Assessment:* City of Calabasas NPDES Monitoring.

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## Region 4

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**Water Segment:** McGrath Beach

**Pollutant:** Coliform Bacteria

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA. the TMDL is being implemented through a Cleanup and abatement Order and is expected to result in attainment of the standard by 2006.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL was approved by USEPA on November 20, 2003. The RWQCB is implementing the TMDL through a Cleanup and Abatement Order.

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## Region 4

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**Water Segment:** McGrath Lake

**Pollutant:** Dieldrin

**Decision:** Do Not Delist

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

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6 the site has sediment toxicity and the pollutant is likely to be causing or contributing to the toxic effect, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Two of two samples exceeded the sediment quality guideline for the pollutant, and two of five samples exhibit toxicity, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

**Lines of Evidence:**

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*Numeric Line of Evidence* Pollutant-Sediment

*Beneficial Use:* ES - Estuarine Habitat, RA - Rare & Endangered Species, WE - Wetland Habitat, WI - Wildlife Habitat

*Matrix:* Sediment



<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:  -Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally, -Protecting food supplies for fish and wildlife, -Protecting reproductive and nursery areas, and -Protecting wildlife corridors.
<i>Evaluation Guideline:</i>	Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use (LARWQCB, 1995)  ERM of 8 ng/g used (Long et al., 1995).
<i>Data Used to Assess Water Quality:</i>	Two samples and both measurements exceed the sediment guideline (Anderson et al., 1998).
<i>Spatial Representation:</i>	Samples were collected concurrently with toxicity measurements.
<i>Temporal Representation:</i>	Four different events in 4 different years.
<i>Data Quality Assessment:</i>	BPTCP QAPP (Stephenson et al., 1994)

<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat, RA - Rare & Endangered Species, WE - Wetland Habitat, WI - Wildlife Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:  -Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally, -Protecting food supplies for fish and wildlife, -Protecting reproductive and nursery areas, and -Protecting wildlife corridors.
<i>Evaluation Guideline:</i>	BPTCP reference envelope approach used.
<i>Data Used to Assess Water Quality:</i>	Five amphipod toxicity tests with 2 measurements showing significant toxicity. One mussel development test with the measurement showing significant toxicity (Anderson et al., 1998).
<i>Spatial Representation:</i>	Samples were collected concurrently with chemical measurements.
<i>Temporal Representation:</i>	Four different events in 4 different years.
<i>Data Quality Assessment:</i>	BPTCP and DFG QAPP (Stephenson et al., 1994)

<b><i>Line of Evidence</i></b>	Remedial Program in Place
<i>Beneficial Use</i>	ES - Estuarine Habitat, RA - Rare & Endangered Species, WE - Wetland Habitat, WI - Wildlife Habitat
<i>Information Used to Assess</i>	The Consolidated Toxic Hot Spots Cleanup Plan describes how the

*Water Quality:*

RWQCB will work with the McGrath State Beach Area Trustee Council to address cleanup of this site. While the planning has progressed, no remediation of the site has occurred. No responsible parties have been identified.

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## Region 4

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**Water Segment:** McGrath Lake

**Pollutant:** Fecal Coliform

**Decision:** Do Not 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 4.2 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. This Line of evidence was probably used to place this water body pollutant combination on the 303(d) list originally. 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 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. Six of 29 samples originally exceeded the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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***Numeric Line of Evidence***

Pollutant-Water

***Beneficial Use:***

R1 - Water Contact Recreation

***Matrix:***

Water

***Water Quality Objective/  
Water Quality Criterion:***

Basin Plan: In waters designated for water contact recreation (REC-1), the fecal coliform concentration shall not exceed a log mean of 200/100 ml (based on a minimum of not less than four samples for any 30-day period), nor shall more than 10 percent of total samples during any 30-day period exceed 400/100 ml.

***Data Used to Assess Water Quality:***

29 bacteria samples, 6 sample exceeding the geometric mean of 200/100 mL. Included in the 29 bacterial samples, 16 sample in the Spring of 2002. 5 of the 16 samples exceeded the 400/100 mL objective.

***Spatial Representation:***

5 sites.

*Temporal Representation:* Spring, Summer, and Fall 1999-2000.

*Data Quality Assessment:* Ventura Division of Environmental Health Services collected the data.

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## Region 4

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**Water Segment:** McGrath Lake

**Pollutant:** Polychlorinated biphenyls

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.6 of the Listing Policy. Under section 4.6, one or more lines of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The site has significant sediment toxicity. None of the samples exceed the sediment guideline but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of 5 samples exceeded the total PCB guideline. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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***Numeric Line of Evidence***

Pollutant-Sediment

***Beneficial Use:***

ES - Estuarine Habitat, RA - Rare & Endangered Species, WE - Wetland Habitat, WI - Wildlife Habitat

***Matrix:***

Sediment

***Water Quality Objective/  
Water Quality Criterion:***

Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:

- Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally,
- Protecting food supplies for fish and wildlife,
- Protecting reproductive and nursery areas, and
- Protecting wildlife corridors.

<i>Evaluation Guideline:</i>	Basin Plan: Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use.
<i>Data Used to Assess Water Quality:</i>	Sediment guideline of 400 ng/g used (MacDonald et al., 2000).
<i>Spatial Representation:</i>	Five sediment samples, none of the samples exceed the sediment guideline (Anderson et al., 1998).
<i>Temporal Representation:</i>	Samples were collected concurrently with toxicity measurements.
<i>Data Quality Assessment:</i>	4 different events in 4 different years.
	BPTCP and DFG QAPP (Stephenson et al., 1994)

<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	ES - Estuarine Habitat, RA - Rare & Endangered Species, WE - Wetland Habitat, WI - Wildlife Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:  -Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally, -Protecting food supplies for fish and wildlife, -Protecting reproductive and nursery areas, and -Protecting wildlife corridors.
<i>Evaluation Guideline:</i>	BPTCP reference envelope approach used.
<i>Data Used to Assess Water Quality:</i>	Five amphipod toxicity tests with 2 measurements showing significant toxicity. One mussel development test with the measurement showing significant toxicity (Anderson et al., 1998).
<i>Spatial Representation:</i>	Samples were collected concurrently with chemical measurements.
<i>Temporal Representation:</i>	Four different events in 4 different years.
<i>Data Quality Assessment:</i>	BPTCP and DFG QAPP (Stephenson et al., 1994)

<b><i>Line of Evidence</i></b>	Remedial Program in Place
<i>Beneficial Use</i>	ES - Estuarine Habitat, RA - Rare & Endangered Species, WE - Wetland Habitat, WI - Wildlife Habitat
<i>Information Used to Assess Water Quality:</i>	The Consolidated Toxic Hot Spots Cleanup Plan describes how the RWQCB will work with the McGrath State Beach Area Trustee Council to address cleanup of this site. While the planning has progressed, no remediation of the site has occurred. No responsible parties have been identified.

## Region 4

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**Water Segment:** McGrath Lake

**Pollutant:** Sediment Bioassays for Estuarine and Marine Water

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.6 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess delisting status. One line of evidence is available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification 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. Two of five samples originally exhibited toxicity but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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**Numeric Line of Evidence** Toxicity

**Beneficial Use:** ES - Estuarine Habitat, RA - Rare & Endangered Species, WE - Wetland Habitat, WI - Wildlife Habitat

**Matrix:** Sediment

**Water Quality Objective/  
Water Quality Criterion:** Basin Plan: Existing habitats and associated populations of wetlands fauna and flora shall be maintained by:

- Maintaining substrate characteristics necessary to support flora and fauna which would be present naturally,
- Protecting food supplies for fish and wildlife,
- Protecting reproductive and nursery areas, and
- Protecting wildlife corridors.

**Evaluation Guideline:** BPTCP reference envelope approach used.

**Data Used to Assess Water Quality:** Five amphipod toxicity tests with 2 measurements showing significant toxicity.  
One mussel development test with the measurement showing significant toxicity

(Anderson et al., 1998).

*Spatial Representation:*

Samples were collected concurrently with chemical measurements.

*Temporal Representation:*

Four different events in 4 different years.

*Data Quality Assessment:*

BPTCP and DFG QAPP (Stephenson et al., 1994)

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## Region 4

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**Water Segment:** Mint Canyon Creek Reach 1 (Confl to Rowler Cyn)

**Pollutant:** Nitrate and Nitrite

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* MU - Municipal & Domestic

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Clara River Nitrogen TMDL was approved by RWQCB on August 7, 2003 and subsequently approved by USEPA on March 18, 2004.

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## Region 4

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**Water Segment:** Palo Verde Shoreline Park Beach

**Pollutant:** Pathogens

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed by RWQCB but it has not been approved by USEPA.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

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## Region 4

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**Water Segment:** Paradise Cove Beach

**Pollutant:** Fecal Coliform

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity (section 2 of the Listing Policy).

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

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## Region 4

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**Water Segment:** Peninsula Beach

**Pollutant:** Bacteria Indicators

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Data in the record shows that this site does not meet water quality standards.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nineteen of 102 samples exceeded the bacteria water quality standards and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA an implementation plan has been approved, and standards are not met.

### Lines of Evidence:

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**Numeric Line of Evidence** Pollutant-Water

**Beneficial Use:** R1 - Water Contact Recreation

**Matrix:** Water

**Water Quality Objective/  
Water Quality Criterion:** 17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports areas shall be as follows:

- (1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed:

- (A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or
- (B) 10,000 total coliform bacteria per 100 milliliters; or
- (C) 400 fecal coliform bacteria per 100 milliliters; or
- (D) 104 enterococcus bacteria per 100 milliliters.

*Data Used to Assess Water Quality:*

One hundred two samples, 19 samples exceeding.

*Spatial Representation:*

1 station: VC(23000). This station represents the beach 50 yards on either side of the sampling point. Samples were collected in the beach area within two rock jetties.

*Temporal Representation:*

Data collected in 1999, 2000, and 2001.

*Data Quality Assessment:*

County Health Department.

***Line of Evidence***

Remedial Program in Place

*Beneficial Use*

R1 - Water Contact Recreation

*Information Used to Assess Water Quality:*

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

## Region 4

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**Water Segment:** Pico Kenter Drain

**Pollutant:** Coliform Bacteria

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

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## Region 4

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<b>Water Segment:</b>	Piru Creek (from gaging station below Santa Felicia Dam to headwaters)
<b>Pollutant:</b>	pH
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under section 4.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Four of 24 samples exceeded the pH water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1.The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>2.The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>3.Four of 24 samples exceeded the pH water quality objective. At least 26 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.2 of the Listing Policy.</li><li>4.Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.
<b>Lines of Evidence:</b>	

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<b><i>Beneficial Use:</i></b>	CO - Cold Freshwater Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WA - Warm Freshwater Habitat, WE - Wetland Habitat, WI - Wildlife Habitat
<b><i>Matrix:</i></b>	Water
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	Basin Plan: The pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges. Ambient pH levels shall not be changed more than 0.5 units from natural conditions as a result of waste discharge.
<b><i>Data Used to Assess Water Quality:</i></b>	Twenty-four water samples, 4 samples exceeding (SWRCB, 2003).
<b><i>Spatial Representation:</i></b>	Samples representative of the Reach.
<b><i>Temporal Representation:</i></b>	Quarterly sampling events.

*Environmental Conditions:* Data 2-5 years old, samples collected at site.  
*Data Quality Assessment:* United Water Conservation District.

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## Region 4

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**Water Segment:** Pole Creek (trib to Santa Clara River Reach 3 )

**Pollutant:** Sulfates

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. This line of evidence was probably used to place this water body pollutant combination on the 303(d) list originally. Eleven of the samples exceeded the sulfate water quality objective in this line of evidence but the number of samples is insufficient to make a delisting determination with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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. Eleven of 12 samples exceeded the sulfate water quality objective but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### **Lines of Evidence:**

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*Numeric Line of Evidence* Pollutant-Water

*Beneficial Use:* AG - Agricultural Supply

*Matrix:* Water

*Water Quality Objective/  
Water Quality Criterion:* Basin Plan: 650 mg/L.

*Data Used to Assess Water  
Quality:* Twelve water samples, 11 samples exceeding (SWRCB, 2003).

*Spatial Representation:* Along creek.

*Temporal Representation:* Less than quarterly sampling.

*Environmental Conditions:* Data 2-5 years old, samples collected at site.  
*Data Quality Assessment:* United Water Conservation District.

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## Region 4

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**Water Segment:** Pole Creek (trib to Santa Clara River Reach 3 )

**Pollutant:** Total Dissolved Solids

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. This line of evidence was probably used to place this water body pollutant combination on the 303(d) list originally. Eleven of the samples exceeded the TDS water quality objective in this line of evidence but the number of samples is insufficient to make a delisting determination with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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. Eleven of 12 samples exceeded the sulfate water quality objective but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

**Lines of Evidence:**

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	AG - Agricultural Supply
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: 1,300 mg/L.

*Data Used to Assess Water Quality:* Twelve water samples, 11 samples exceeding (SWRCB, 2003).

*Spatial Representation:* Along creek.

*Temporal Representation:* Less than quarterly sampling.

*Data Quality Assessment:* United Water Conservation District.

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## Region 4

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**Water Segment:** Promenade Park Beach

**Pollutant:** Bacteria Indicators

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle. Data also indicate that water quality standards are not met.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eleven of 97 samples exceeded the water quality standard and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**SWRCB Staff Recommendation:** After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA, an implementation plan has been approved, and water quality standards are not met.

### Lines of Evidence:

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**Numeric Line of Evidence** Pollutant-Water

**Beneficial Use:** R1 - Water Contact Recreation

**Matrix:** Water

**Water Quality Objective/  
Water Quality Criterion:** 17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports areas shall be as follows:

- (1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not

exceed:  
 (A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or  
 (B) 10,000 total coliform bacteria per 100 milliliters; or  
 (C) 400 fecal coliform bacteria per 100 milliliters; or  
 (D) 104 enterococcus bacteria per 100 milliliters.

*Data Used to Assess Water Quality:* 97 samples, 11 sample exceeding (SWRCB, 2003).

*Spatial Representation:* 1 station: VC(14000). This station represents the beach 50 yards on either side of the sampling point. Data collected at Figueroa Street.

*Temporal Representation:* Data collected in 1999, 2000, and 2001.

*Data Quality Assessment:* County Health Department.

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***Numeric Line of Evidence*** Pollutant-Water

*Beneficial Use:* R1 - Water Contact Recreation

*Matrix:* Water

*Water Quality Objective/  
Water Quality Criterion:* 17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports areas shall be as follows:  
 (1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed:  
 (A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or  
 (B) 10,000 total coliform bacteria per 100 milliliters; or  
 (C) 400 fecal coliform bacteria per 100 milliliters; or  
 (D) 104 enterococcus bacteria per 100 milliliters.

*Data Used to Assess Water Quality:* 94 samples, 14 samples exceeding (SWRCB, 2003).

*Spatial Representation:* 1 station: VC(15000). This station represents the beach 50 yards on either side of the sampling point. Data collected at Redwood Apartments.

*Temporal Representation:* Data collected in 1999, 2000, and 2001.

*Data Quality Assessment:* County Health Department.

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***Numeric Line of Evidence*** Pollutant-Water

*Beneficial Use:* R1 - Water Contact Recreation

*Matrix:* Water

*Water Quality Objective/  
Water Quality Criterion:* 17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports areas shall be as follows:  
 (1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed:  
 (A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total

	coliform bacteria exceeds 0.1; or (B) 10,000 total coliform bacteria per 100 milliliters; or (C) 400 fecal coliform bacteria per 100 milliliters; or (D) 104 enterococcus bacteria per 100 milliliters.
<i>Data Used to Assess Water Quality:</i>	99 samples, 14 samples exceeding (SWRCB, 2003).
<i>Spatial Representation:</i>	1 station: VC(16000). This station represents the beach 50 yards on either side of the sampling point. Data collected at Oak Street.
<i>Temporal Representation:</i>	Data collected in 1999, 2000, and 2001.
<i>Data Quality Assessment:</i>	County Health Department.
<i>QA/QC Equivalent:</i>	County Health Department.

<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<i>Beneficial Use:</i>	R1 - Water Contact Recreation
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports areas shall be as follows: (1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed: (A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or (B) 10,000 total coliform bacteria per 100 milliliters; or (C) 400 fecal coliform bacteria per 100 milliliters; or (D) 104 enterococcus bacteria per 100 milliliters.
<i>Data Used to Assess Water Quality:</i>	105 samples, 19 samples exceeding (SWRCB, 2003).
<i>Spatial Representation:</i>	1 station: VC(17000). This station represents the beach 50 yards on either side of the sampling point. Data collect Holiday Inn (south of drain at California Street).
<i>Temporal Representation:</i>	Data collected in 1999, 2000, and 2001.
<i>Data Quality Assessment:</i>	County Health Department.

<b><i>Line of Evidence</i></b>	Remedial Program in Place
<i>Beneficial Use</i>	R1 - Water Contact Recreation
<i>Information Used to Assess Water Quality:</i>	A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

## Region 4

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**Water Segment:** Puddingstone Reservoir

**Pollutant:** Mercury

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from 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 insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 2 samples exceeded the OEHHA Screening Value but the number of samples is insufficient to determine with the confidence and power required by 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.
<i>Evaluation Guideline:</i>	0.3 ug/g (OEHHA Screening Value)
<i>Data Used to Assess Water Quality:</i>	Two out of 2 samples exceeded. Two file composite samples of largemouth bass were collected in 1992 and 1999. Both samples exceeded the guideline (TSMP, 2002).
<i>Spatial Representation:</i>	One station located from the middle cove on the west shore and from the inlet cove on the northeast shore.
<i>Temporal Representation:</i>	Samples were collected in 1992 and 1999.



*Data Quality Assessment:*

Toxic Substances Monitoring Program 1992-93 Data Report.  
Environmental Chemistry Quality Assurance and Data Report for the Toxic  
Substances Monitoring Program, 1996-2000. Department of Fish and Game

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## Region 4

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**Water Segment:** Redondo Beach

**Pollutant:** Coliform Bacteria

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity (section 2 of the Listing Policy).

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

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## Region 4

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**Water Segment:** Rincon Beach

**Pollutant:** Bacteria Indicators

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Water quality indicate that the bacteria water quality standard is not met.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-six of 107 samples exceeded the bacteria water quality standards and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**SWRCB Staff Recommendation:** After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA, an implementation plan has been approved, and water quality standards are not attained.

### Lines of Evidence:

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**Numeric Line of Evidence** Pollutant-Water

**Beneficial Use:** R1 - Water Contact Recreation

**Matrix:** Water

**Water Quality Objective/  
Water Quality Criterion:** 17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports areas shall be as follows:

- (1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed:
- (A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total

	coliform bacteria exceeds 0.1; or (B) 10,000 total coliform bacteria per 100 milliliters; or (C) 400 fecal coliform bacteria per 100 milliliters; or (D) 104 enterococcus bacteria per 100 milliliters.
<i>Data Used to Assess Water Quality:</i>	107 samples, 26 samples exceeding (SWRCB, 2003).
<i>Spatial Representation:</i>	1 station: VC(1000). This station represents the beach 50 yards on either side of the sampling point. Sample were collected 50 yards from the mouth of the creek.
<i>Temporal Representation:</i>	Data collected in 1999, 2000, and 2001.
<i>Data Quality Assessment:</i>	County Health Department.

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<i>Beneficial Use:</i>	R1 - Water Contact Recreation
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports areas shall be as follows: (1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed: (A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or (B) 10,000 total coliform bacteria per 100 milliliters; or (C) 400 fecal coliform bacteria per 100 milliliters; or (D) 104 enterococcus bacteria per 100 milliliters.
<i>Data Used to Assess Water Quality:</i>	Data used to assess water quality 101 samples, 15 samples exceeding (SWRCB, 2003).
<i>Spatial Representation:</i>	1 station: VC(1100). This station represents the beach 50 yards on either side of the sampling point. Samples collected at the end of the footpath.
<i>Temporal Representation:</i>	Data collected in 1999, 2000, and 2001.
<i>Data Quality Assessment:</i>	County Health Department.

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<i>Beneficial Use:</i>	R1 - Water Contact Recreation
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	17 CCR 7958 (in part): The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports areas shall be as follows: (1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed: (A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or

(B) 10,000 total coliform bacteria per 100 milliliters; or  
(C) 400 fecal coliform bacteria per 100 milliliters; or  
(D) 104 enterococcus bacteria per 100 milliliters.

*Data Used to Assess Water Quality:*

104 samples, 23 samples exceeding (SWRCB, 2003).

*Spatial Representation:*

1 station: VC(1050). This station represents the beach 50 yards on either side of the sampling point. Sampled collected 150 yards south of the creek's mouth.

*Temporal Representation:*

Data collected in 1999, 2000, and 2001.

*Data Quality Assessment:*

County Health Department.

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***Line of Evidence***

Remedial Program in Place

*Beneficial Use*

R1 - Water Contact Recreation

*Information Used to Assess Water Quality:*

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

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## Region 4

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**Water Segment:** Rio De Santa Clara/Oxnard Drain No. 3

**Pollutant:** Chlordane

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from 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 insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 2 samples exceeded the OEHHA Screening Value but the number of samples is insufficient to determine with the confidence and power required by 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.
<i>Evaluation Guideline:</i>	100 ng/g NAS Guideline (whole fish)
<i>Data Used to Assess Water Quality:</i>	Two out of 2 samples exceeded. A total of 2 whole fish composite samples of mosquitofish were collected. Both samples were collected in 1997 (TSMP, 2002).
<i>Spatial Representation:</i>	One station near Oxnard Drain located downstream of the bridge at Arnold Road.
<i>Temporal Representation:</i>	The samples were collected only in 1997.

*Data Quality Assessment:*

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

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## Region 4

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**Water Segment:** Rio De Santa Clara/Oxnard Drain No. 3

**Pollutant:** DDT

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from 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 insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 2 samples exceeded the OEHHA Screening Value but the number of samples is insufficient to determine with the confidence and power required by 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.
<i>Evaluation Guideline:</i>	1000 ng/g NAS Guideline (whole fish)
<i>Data Used to Assess Water Quality:</i>	Two out of 2 samples exceeded. A total of 2 whole fish composite samples of mosquitofish were collected. Mosquitofish samples were collected in 1997. The guideline was exceeded in both mosquitofish samples (TSMP, 2002).
<i>Spatial Representation:</i>	One station near Oxnard Drain located downstream of the bridge at Arnold Road.
<i>Temporal Representation:</i>	Samples were collected in 1997.



*Data Quality Assessment:*

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

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## Region 4

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**Water Segment:** Rio De Santa Clara/Oxnard Drain No. 3

**Pollutant:** Toxaphene

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from 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 insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 2 samples exceeded the OEHHA Screening Value but the number of samples is insufficient to determine with the confidence and power required by 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.
<i>Evaluation Guideline:</i>	100 ng/g NAS Guideline (whole fish)
<i>Data Used to Assess Water Quality:</i>	Two out of 2 samples exceeded. A total of 2 whole fish composite samples of mosquitofish were collected. Mosquitofish samples were collected in 1997. The guideline was exceeded in both mosquitofish samples (TSMP, 2002).
<i>Spatial Representation:</i>	One station near Oxnard Drain located downstream of the bridge at Arnold Road.
<i>Temporal Representation:</i>	Samples were collected in 1997.

*Data Quality Assessment:*

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

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## Region 4

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**Water Segment:** Rio Hondo Reach 1 (Confl. LA River to Snt Ana Fwy)

**Pollutant:** Ammonia

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* CO - Cold Freshwater Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WA - Warm Freshwater Habitat, WE - Wetland Habitat, WI - Wildlife Habitat

*Information Used to Assess Water Quality:* An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this reach (SWRCB, 2003).

In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced. Research facility operation shows that the monthly average ammonia concentration will fully comply with the chronic ammonia objective. Objective is expected to be applicable in June 2003. It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information

in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. Also, it is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants are much lower than downstream concentrations (up to an order of magnitude difference).

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## Region 4

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**Water Segment:** Rio Hondo Reach 1 (Confl. LA River to Snt Ana Fwy)

**Pollutant:** pH

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R2 - Non-Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004.

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## Region 4

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**Water Segment:** San Antonio Creek (Tributary to Ventura River Reach 4)

**Pollutant:** Nitrogen

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. This line of evidence was used to place this water body pollutant combination on the 303(d) list originally. Four of the samples exceeded the nitrogen site specific water quality objective in this line of evidence but the number of samples is insufficient to make a delisting determination with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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.
1. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of 23 samples exceeded the nitrogen site specific water quality objective, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

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

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	CO - Cold Freshwater Habitat, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI - Wildlife Habitat
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: 5 mg/L (as NO <sub>3</sub> -N and NO <sub>2</sub> -N). Table 3-8 of the Basin Plan.
<i>Data Used to Assess Water Quality:</i>	Twenty-three water samples, 4 samples exceeding (SWRCB, 2003).
<i>Spatial Representation:</i>	Two sample sites.

*Temporal Representation:* Winter 1998 - Summer 2000.

*Data Quality Assessment:* Ojai Valley Wastewater Treatment Plant.

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## Region 4

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<b>Water Segment:</b>	San Gabriel River Reach 2 (Firestone to Whittier Narrows Dam)
<b>Pollutant:</b>	Copper
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess delisting status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. The combined lines of evidence result in a total of 11 samples exceeding the CTR criteria continuous concentration.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>3. Eleven of 88 samples exceeded the CTR criteria and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.</li><li>4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
<b>Lines of Evidence:</b>	

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<b><i>Beneficial Use:</i></b>	RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WE - Wetland Habitat, WI - Wildlife Habitat
<b><i>Matrix:</i></b>	Water
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	California Toxics Rule: The Criteria Continuous Concentration for dissolved copper is dependent on the water hardness. After considering the event specific hardness values, the range of acceptable concentrations is 0.17 ug/L to 28 ug/L.
<b><i>Data Used to Assess Water Quality:</i></b>	Twenty-six water samples, 7 samples exceeding (LACDPW, 2004c).
<b><i>Spatial Representation:</i></b>	One site (S 14).
<b><i>Temporal Representation:</i></b>	Fall, winter, spring (1997-2000).

*Data Quality Assessment:* Stormwater Monitoring Program

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*Numeric Line of Evidence* Pollutant-Water

*Beneficial Use:* RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WE - Wetland Habitat, WI - Wildlife Habitat

*Matrix:* Water

*Water Quality Objective/  
Water Quality Criterion:* CTR Dissolved Copper Criterion for continuous concentration (CCC) in water for the protection of aquatic life is expressed as a function of the total hardness of the water body. The aquatic life criteria will vary depending of total hardness reported at the sampling site. The CCC for dissolved copper is the highest concentration to which aquatic life can be exposed for an extended period of time (four days) without deleterious effects. This criterion is linked and applicable for the protection of aquatic life Beneficial Uses.

*Data Used to Assess Water Quality:* Numeric data generated from 62 samples taken from 10/14/97 to 1/13/04 at one to two-week sampling interval. Four samples exceeded the dissolved Copper Continuous Criterion Concentration, which equals the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4days) without deleterious effects (LACDPW, 2004c).

*Spatial Representation:* One (1) sampling station sampled from 10/14/97 to 1/13/04.

*Temporal Representation:* Sixty-two samples taken during the wet and dry season from 10/14/97 to 1/13/04 at approximately one to two week intervals.

*Environmental Conditions:* Results are from samples taken from 1997 to 2004. The dissolved copper criterion was exceeded in 4 out of 62 measurements. The 4 exceedances occurred during the El Niño rain season in the winter of 1997 - 1998.

*Data Quality Assessment:* Evaluation of Analytes and QA/QC Specifications for Monitoring Program (Woodward-Clyde, 1996) Los Angeles County Department of Public Works.

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## Region 4

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**Water Segment:** San Gabriel River Reach 2 (Firestone to Whittier Narrows Dam)

**Pollutant:** Fecal Coliform

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. Sixteen samples exceeded the fecal coliform water quality objective but the total number of samples taken is insufficient to determine whether the water body pollutant combination can be delisted with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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. Sixteen of 16 samples exceeded the fecal coliform water quality objective. At least 26 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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***Numeric Line of Evidence***

Pollutant-Water

***Beneficial Use:***

MU - Municipal & Domestic, R1 - Water Contact Recreation

***Matrix:***

Water

***Water Quality Objective/  
Water Quality Criterion:***

"In waters designated for contact recreation (REC-1), the fecal coliform concentration shall not exceed a log mean of 200/100 ml"  
From the LA Regional Water Quality Control Board's Basin Plan

***Data Used to Assess Water  
Quality:***

Sixteen out of 16 samples at this location exceeded the objective for fecal coliform (LACDPW, 2004c).

Summary of Results for the 2000-2001 Routine Monitoring at the San Gabriel River (Table B-5)

*Spatial Representation:* The San Gabriel River Monitoring Station is located at an historic stream gage station (Stream Gage No. F263C-R), below San Gabriel River Parkway in Pico Rivera. At this location the upstream tributary area is 450 square miles. The San Gabriel River, at the gauging station, is a grouted rock-concrete stabilizer along the western levee and a natural section on the eastern side. Flow measurement and water sampling are conducted in the grouted rock area along the western levee of the river. The length of the concrete stabilizer is nearly 70 feet. The San Gabriel River sampling location has been an active stream gauging station since 1968.

*Temporal Representation:* Samples taken between 10/28/2000 and 4/30/2003

*Environmental Conditions:* Samples taken on 10/10/2002 and 4/30/2003 were 'DRY' samples. All others were 'WET'.

*Data Quality Assessment:* Detailed QA/QC contained in this report.

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## Region 4

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<b>Water Segment:</b>	San Gabriel River Reach 3 (Whittier Narrows to Ramona)
<b>Pollutant:</b>	Toxicity
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for delisting under sections 4.6 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6. One Sample exceeded the NOEC but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy if standards are met.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1.The sediment quality guideline used complies, with the requirements of section 6.1.3 of the Policy.</li><li>2.The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>3.The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>4.One of the 15 samples exceeded the NOEC. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy.</li><li>5.Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.
<b>Lines of Evidence:</b>	

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<b><i>Numeric Line of Evidence</i></b>	Toxicity
<b><i>Beneficial Use:</i></b>	WA - Warm Freshwater Habitat
<b><i>Matrix:</i></b>	Water
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	Narrative Toxicity Basin Plan WQO is applicable to the protection of aquatic life BUs.
<b><i>Evaluation Guideline:</i></b>	No observed effect concentration (NOEC) is the highest tested concentration of toxicant to which organisms are exposed in a full life-cycle or partial life-cycle (shot-term) test that causes no observable adverse effect on the test organisms. The guideline is used and recommended to determine the highest concentration of toxicant at which the values of the observed responses are not statistically significantly different from the control.

<i>Data Used to Assess Water Quality:</i>	Numeric data generated from a total of 9 samples from Reach 3 stations R-11 and RA, taken on a quarterly basis from 7/2003 to 6/2004. Significant toxicity was recorded in one sample from the first quarter of 2004 in the chronic bioassay test with <i>P. promelas</i> (fathead minnow).
<i>Spatial Representation:</i>	Two sample sites sampled from 7/2003 through 6/2004 on a quarterly basis. Stations R11 and RA located upstream and down stream in Reach 3 of the San Gabriel River.
<i>Temporal Representation:</i>	Nine samples were taken on a quarterly basis from 7/2003 to 6/2004.
<i>Environmental Conditions:</i>	The submitted toxicity results are from 2003-04. In June 2003, the LA County Sanitation Districts completed conversion of water reclamation plants in the San Gabriel River watershed to nitrification/denitrification (NDN) mode.
<i>Data Quality Assessment:</i>	Evaluation of Analytes and QA/QC Specifications for Monitoring Program (Woodward-Clyde, 1996) Los Angeles County Department of Public Works.

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<b><i>Numeric Line of Evidence</i></b>	Toxicity
<i>Beneficial Use:</i>	WA - Warm Freshwater Habitat
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	Narrative Toxicity Basin Plan WQO is applicable to the protection of aquatic life BUs.
<i>Evaluation Guideline:</i>	No observed effect concentration (NOEC) is the highest tested concentration of toxicant to which organisms are exposed in a full life-cycle or partial life-cycle (shot-term) test that causes no observable adverse effect on the test organisms. The guideline is used and recommended to determine the highest concentration of toxicant at which the values of the observed responses are not statistically significantly different from the control.
<i>Data Used to Assess Water Quality:</i>	Numeric toxicity results generated from a total of six samples none of which were found to be toxic. This was a collaborative toxicity study conducted by the U.S. EPA and the Districts in August through October 2003. The study generated a total of 6 samples taken for Reach 3. Two (2) samples were analyzed from the August 2003 sampling, two samples were analyzed from the September 2003 sampling, and 2 samples were analyzed from the October 2003 sampling from receiving water station R-11.
<i>Spatial Representation:</i>	Two sample sites sampled from 7/2003 through 6/2004 at a quarterly basis. Stations R11 in Reach 3 of the San Gabriel River.
<i>Temporal Representation:</i>	Six samples taken during the three (3) sampling events of the collaborative monitoring program from 7/2003 to 6/2004.
<i>Environmental Conditions:</i>	The collaborative study generated a total of 6 samples taken for Reach 3. Two samples were analyzed from the August 2003 sampling, two samples were analyzed from the September 2003 sampling, and 2 samples were analyzed from the October 2003 sampling from receiving water station R-11.
<i>Data Quality Assessment:</i>	Evaluation of Analytes and QA/QC Specifications for Monitoring Program (Woodward-Clyde, 1996) Los Angeles County Department of Public Works.

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## Region 4

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**Water Segment:** San Pedro Bay Near/Off Shore Zones

**Pollutant:** DDT

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from 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 insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 4 samples exceeded the OEHHA Screening Value but the number of samples is insufficient to determine with the confidence and power required by 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA), IN - Industrial Service Supply
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.
<i>Evaluation Guideline:</i>	100 ng/g (OEHHA Screening Value)
<i>Data Used to Assess Water Quality:</i>	Three out of 4 samples exceeded. All 4 samples were filet composites representing the following species: queenfish, spotted turbot, and white croaker. All but one white croaker sample exceeded guideline. This white croaker and 99.89 ng/g DDT just below the guideline (TSMP, 2002).
<i>Spatial Representation:</i>	One station was sampled: Belmont Pier.
<i>Temporal Representation:</i>	Samples were collected in July and October 1999.

*Data Quality Assessment:*

CFCP 1998 Year 1 QA Summary Pesticides and PCBs. California Department of Fish and Game.  
CDFG Fish and Wildlife Water Pollution Control Laboratory Data Quality Assurance Report. 1999 Coastal Fish Contamination Program

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## Region 4

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**Water Segment:** San Pedro Bay Near/Off Shore Zones

**Pollutant:** Polychlorinated biphenyls

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from 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 insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 4 samples exceeded the OEHHA Screening Value but the number of samples is insufficient to determine with the confidence and power required by 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### **Lines of Evidence:**

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA), IN - Industrial Service Supply
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.
<i>Evaluation Guideline:</i>	20 ng/g (OEHHA Screening Value for Belmont Pier Health Advisory for DDT & PCB)
<i>Data Used to Assess Water Quality:</i>	Four out of 4 samples exceeded. All 4 samples were file composites representing the following species: queenfish, spotted turbot, and white croaker. All samples exceeded guideline.
<i>Spatial Representation:</i>	One station was sampled: Belmont Pier.
<i>Temporal Representation:</i>	Samples were collected in July and October 1999.

*Data Quality Assessment:*

CFCP 1998 Year 1 QA Summary Pesticides and PCBs. California Department of Fish and Game.  
CDFG Fish and Wildlife Water Pollution Control Laboratory Data Quality Assurance Report. 1999 Coastal Fish Contamination Program (CFCP Year 2). California Department of

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## Region 4

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**Water Segment:** Santa Clara River Reach 3 (Freeman Diversion to A Street)

**Pollutant:** Ammonia

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* MU - Municipal & Domestic

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Clara River Nitrogen TMDL was approved by RWQCB on August 7, 2003 and subsequently approved by USEPA on March 18, 2004.

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## Region 4

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**Water Segment:** Santa Clara River Reach 3 (Freeman Diversion to A Street)

**Pollutant:** Total Dissolved Solids

**Decision:** Do Not Delist

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

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 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. Thirty-eight of 189 samples exceeded the TDS water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Lines of Evidence:**

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	AG - Agricultural Supply, GW - Groundwater Recharge
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: 1,300 mg/L.
<i>Data Used to Assess Water Quality:</i>	One-hundred and eighty-nine samples, 38 samples exceeding.
<i>Spatial Representation:</i>	Samples representative of Reach.

*Temporal Representation:*

Quarterly sampling events.

*Data Quality Assessment:*

POTW, United Water Conservation District, Department of Water Resources.

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## Region 4

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<b>Water Segment:</b>	Santa Clara River Reach 5 (Blue Cut gaging station to West Pier Hwy 99 Bridge) (was named Santa Clara River Reach 7 on 2002 303(d) lists)
<b>Pollutant:</b>	Nitrate and Nitrite
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.</p>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

### Lines of Evidence:

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<b><i>Beneficial Use:</i></b>	MU - Municipal & Domestic
<b><i>Matrix:</i></b>	Water
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	The Basin Plan Site Specific Water Quality Objective for the sum of Nitrate-Nitrogen and Nitrite-Nitrogen of 5 mg/l is linked and applicable for the protection of drinking water supplies.
<b><i>Data Used to Assess Water Quality:</i></b>	Numeric data generated from a total of 29 samples taken in four sampling stations (seven samples from station RC, seven from station RD, seven from RE and eight from RB-01 from 9/10/03 to 5/12/04 at approximately monthly sampling intervals. Two samples taken in station RD in 9/10/03 and 1/14/04 exceeded the Nitrate and Nitrite 5mg/l Site-specific WQO to protect MUN BUs (LACSD, 2004b).
<b><i>Spatial Representation:</i></b>	Samples were taken at four samples stations ( RC ,RD, RE, and RB01) from 9/10/03 to 5/12/04 at approximately monthly sampling intervals.
<b><i>Temporal Representation:</i></b>	Twenty-nine samples where taken from 9/10/03 to 5/12/04 at approximately monthly sampling intervals at four sampling stations within Reach 7 of the Santa

Clara River.

*Environmental Conditions:* The Districts' Valencia Water Reclamation Plant, which is located in Reach 7, was partially converted to NDN mode starting May 12, 2003, and was fully converted to NDN mode on June 18, 2003. The implementation of NDN at these WRP's represents a significant change in water quality nitrogen conditions in Reach 7 of the Santa Clara River.

*Data Quality Assessment:* Quality Assurance Document Of The County Sanitation Districts Of Los Angeles County. July 2003.

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***Numeric Line of Evidence***

Pollutant-Water

*Beneficial Use:*

MU - Municipal & Domestic

*Matrix:*

Water

*Water Quality Objective/  
Water Quality Criterion:*

The Basin Plan Site Specific Water Quality Objective for Santa Clara River, Reach 7, shall not exceed the sum of Nitrate-Nitrogen plus Nitrite-Nitrogen concentrations of 5 mg/l for the protection of drinking water supplies. In addition, Los Angeles regional waters shall not exceed concentrations of 10 mg/l as Nitrate- Nitrogen or 1 mg/l as Nitrite-Nitrogen.

*Data Used to Assess Water  
Quality:*

Numeric data generated from a total of eight (8) samples taken from 9/10/03 to 4/27/04 at approximately monthly sampling intervals. None of the samples exceeded the site specific WQO for Santa Clara River, Reach 7 for the sum of Nitrate-Nitrogen plus Nitrite-Nitrogen or the WQOs for Nitrate- Nitrogen, or Nitrite-Nitrogen individually (LACSD, 2004b).

*Spatial Representation:*

One sample site sampled from 9/10/03 to 4/27/04 at approximately monthly sampling intervals.

*Temporal Representation:*

Eight (8) samples taken at monthly intervals from 9/10/03 to 4/27/04.

*Environmental Conditions:*

Data age is 1 year to 8 months old obtained from the United Water Conservation District (UWCD) for their receiving water sampling station located near the Los Angeles/ Ventura County Line at the end of Reach 7 of the Santa Clara River.

*Data Quality Assessment:*

Fruit Growers Laboratory Quality Manual.

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***Line of Evidence***

Remedial Program in Place

*Beneficial Use*

MU - Municipal & Domestic

*Information Used to Assess  
Water Quality:*

A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Clara River Nitrogen TMDL was approved by RWQCB on August 7, 2003 and subsequently approved by USEPA on March 18, 2004.

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## Region 4

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**Water Segment:** Santa Monica Bay Offshore/Nearshore

**Pollutant:** Chlordane

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for delisting under sections 4.6 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site does have significant sediment toxicity but chlordane is not likely to cause or contribute to any toxic effect. The benthic community is impacted.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies, with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. None of the 23 chlordane samples exceeded the sediment guideline, and five of the 23 samples exhibit toxicity, although toxicity is documented, the pollutant does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy. However, at least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Population/Community Degradation
<i>Beneficial Use:</i>	MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	Narrative Toxicity Basin Plan WQO is applicable to the protection of aquatic life BUs.
<i>Evaluation Guideline:</i>	Benthic Response Index (BRI) is a guidance developed by SCCWRP based on changes in biodiversity along a pollutant gradient that is defined by the index values. The index points define specific percentages where the biodiversity of



	the reference pool is lost. The BRI defines the abundance weighted pollution tolerance of the species present at a site and ranges from Response level RL 1 through 4. RL1 indicates marginal deviations from reference conditions (REF), while RL 2 through 4 are considered evidence of disturbed benthic conditions.
<i>Data Used to Assess Water Quality:</i>	Data generated from 23 samples within different stations in Santa Monica Bay using the BRI to assess benthic conditions indicate that 5 samples marginally deviate from reference conditions (LACSD, 2004b).
<i>Spatial Representation:</i>	Twenty-three sample sites within Santa Monica Bay at different dates in 1998.
<i>Temporal Representation:</i>	Twenty-three samples taken during 1998 at 23 different sampling stations.
<i>Data Quality Assessment:</i>	Southern California Bight 1998 Regional Marine Monitoring Survey (Bight 98) Quality Assurance Manual (CSCCWRP Bight 98 Steering Committee. July 1998)

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Sediment
<i>Beneficial Use:</i>	MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	Narrative Basin Plan WQO for pesticide is applicable to the protection of aquatic life BUs.
<i>Evaluation Guideline:</i>	Sediment Quality Guidelines (SQGs) are used to determine the toxic effects of a sample , concurrently collected measurements of chemical concentrations can be used to associate toxic effects with toxicity or other biological effects. The predictability of toxicity, using the SQGs values reported (Long et al., 1998) is reasonably good and is most useful if accompanied by data from biological analyses, toxicological analyses, and other interpretative tools.
<i>Data Used to Assess Water Quality:</i>	Data generated from 23 samples different stations in Santa Monica Bay using SQGs to assess toxic effects due total chlordane. No sample exceeded the total chlordane SQG (LACSD, 2004).
<i>Spatial Representation:</i>	Twenty-three sample sites were sampled within Santa Monica Bay at different dates during 1998.
<i>Temporal Representation:</i>	Twenty three samples were taken from twenty three different sampling stations within the Santa Monica Bay during 1998.
<i>Data Quality Assessment:</i>	Quality Assurance Document Of The County Sanitation Districts Of Los Angeles County. July 2003.

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## Region 4

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**Water Segment:** Santa Monica Bay Offshore/Nearshore

**Pollutant:** Polychlorinated biphenyls

**Decision:** Do Not Delist

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of the 7 samples exceeded the water quality objectives but the number of samples is insufficient to determine with the confidence and power required by 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Los Angeles RWQCB Basin Plan: Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.
<i>Evaluation Guideline:</i>	20 ng/g (OEHHA Screening Value).
<i>Data Used to Assess Water Quality:</i>	Six out of 7 samples exceeded. All 7 samples were filet composites representing the following species: barred surfperch, California corbina, queenfish, walleye surfperch, and white croaker. All but one of two California corbina exceeded guideline (TSMP, 2002).
<i>Spatial Representation:</i>	Two stations were sampled: Santa Monica Pier and Venice Pier.
<i>Temporal Representation:</i>	Samples were collected in July and November 1999.

*Data Quality Assessment:*

CFCP 1998 Year 1 QA Summary Pesticides and PCBs. California Department of Fish and Game.

CDFG Fish and Wildlife Water Pollution Control Laboratory Data Quality Assurance Report. 1999 Coastal Fish Contamination Program (CFCP Year 2). California Department of Fish and Game.

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## Region 4

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<b>Water Segment:</b>	Santa Monica Bay Offshore/Nearshore
<b>Pollutant:</b>	Polycyclic Aromatic Hydrocarbons (PAHs) (Aquatic Ecosystems)
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	This pollutant is being considered for delisting under sections 4.6 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site does have significant sediment toxicity but this PAHs are is not likely to cause or contribute to any toxic effect. The benthic community is impacted.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies, with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. None of the 23 samples exceeded the PAHs sediment guideline, but five of the 23 samples exhibit toxicity. Although toxicity is documented, the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.
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### Lines of Evidence:

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<b><i>Numeric Line of Evidence</i></b>	Population/Community Degradation
<b><i>Beneficial Use:</i></b>	MA - Marine Habitat
<b><i>Matrix:</i></b>	Sediment
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	Narrative Toxicity Basin Plan WQO is applicable to the protection of aquatic life BUs.
<b><i>Evaluation Guideline:</i></b>	Benthic Response Index (BRI) is a guidance developed by SCCWRP based on changes in biodiversity along a pollutant gradient that is defined by the index values. The index points define specific percentages where the biodiversity of

the reference pool is lost. The BRI defines the abundance weighted pollution tolerance of the species present at a site and ranges from Response level RL 1 through 4. RL1 indicates marginal deviations from reference conditions (REF), while RL 2 through 4 are considered evidence of disturbed benthic conditions.

<i>Data Used to Assess Water Quality:</i>	Data generated from 23 samples within different stations in Santa Monica Bay using the BRI to assess benthic conditions indicate that 5 samples marginally deviate from reference conditions (LACSD, 2004b).
<i>Spatial Representation:</i>	Twenty-three sample sites within Santa Monica Bay at different dates in 1998.
<i>Temporal Representation:</i>	Twenty-three samples taken during 1998 at 23 different sampling stations.
<i>Data Quality Assessment:</i>	Southern California Bight 1998 Regional Marine Monitoring Survey (Bight 98) Quality Assurance Manual (CSCCWRP Bight 98 Steering Committee. July 1998)

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Sediment
<i>Beneficial Use:</i>	MA - Marine Habitat
<i>Matrix:</i>	Sediment
<i>Water Quality Objective/ Water Quality Criterion:</i>	Narrative Ocean Plan WQO regarding biological characteristics specifies that marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.
<i>Evaluation Guideline:</i>	Sediment Quality Guidelines (SQGs) are used to determine the toxic effects of a sample, concurrently collected measurements of chemical concentrations can be used to associate toxic effects with toxicity or other biological effects. The predictability of toxicity, using the SQGs values reported (Fairey et al., 2001) is reasonably good and is most useful if accompanied by data from biological analyses, toxicological analyses, and other interpretative tools.
<i>Data Used to Assess Water Quality:</i>	Data generated from 23 samples at different stations in Santa Monica Bay using SQGs to assess toxic effects due total PAHs. No sample exceeded the total PAHs SQG for the protection of marine aquatic life (LACSD, 2004b).
<i>Spatial Representation:</i>	Twenty-three sample sites were sampled within Santa Monica Bay at different dates during 1998.
<i>Temporal Representation:</i>	Twenty-seven samples were taken from 5/7/02 through 5/4/04 at quarterly intervals from three sampling stations (R1, R2, and R5).
<i>Data Quality Assessment:</i>	Quality Assurance Document Of The County Sanitation Districts Of Los Angeles County. July 2003.

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## Region 4

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**Water Segment:** Santa Monica Beach

**Pollutant:** Coliform Bacteria

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity (section 2 of the Listing Policy).

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

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## Region 4

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**Water Segment:** Santa Monica Canyon

**Pollutant:** Coliform Bacteria

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle.

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

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

### Lines of Evidence:

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**Line of Evidence** Remedial Program in Place

**Beneficial Use** R1 - Water Contact Recreation

**Information Used to Assess Water Quality:** A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

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## Region 4

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**Water Segment:** Sepulveda Canyon

**Pollutant:** Coliform Bacteria

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

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## Region 4

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<b>Water Segment:</b>	Sespe Creek (from 500 ft below confluence with Little Sespe Cr to headwaters)
<b>Pollutant:</b>	Chloride
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>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.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Six samples exceeded the water quality objective but the total number of samples taken is insufficient to determine if standards are met with the sufficient confidence and power required by the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1.The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>2.The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>3.Six of 16 samples exceeded the water quality objective. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy.</li><li>4.Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.
<b>Lines of Evidence:</b>	

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<b><i>Beneficial Use:</i></b>	AG - Agricultural Supply, BI - Preserva.of Bio.Hab.of Spec.Signif., CO - Cold Freshwater Habitat, MI - Fish Migration, RA - Rare & Endangered Species, SP - Fish Spawning, WA - Warm Freshwater Habitat, WE - Wetland Habitat, WI - Wildlife Habitat
<b><i>Matrix:</i></b>	Water
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	Basin Plan: 60 mg/L.
<b><i>Data Used to Assess Water Quality:</i></b>	There were sixteen total water samples, with 6 samples exceeding the objective (SWRCB, 2003).
<b><i>Spatial Representation:</i></b>	Samples are representative of the Reach.

*Temporal Representation:* Quarterly sampling events.

*Data Quality Assessment:* United Water Conservation District methods.

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## Region 4

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**Water Segment:** Surfers Point at Seaside

**Pollutant:** Bacteria Indicators

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

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## Region 4

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**Water Segment:** Topanga Beach

**Pollutant:** Coliform Bacteria

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

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## Region 4

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**Water Segment:** Torrance Beach

**Pollutant:** Coliform Bacteria

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

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## Region 4

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**Water Segment:** Torrey Canyon Creek

**Pollutant:** Nitrate and Nitrite

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.

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

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list because a TMDL and implementation plan have been approved.

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* MU - Municipal & Domestic

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Clara Rive Nitrogen TMDL was approved by RWQCB on August 7, 2003 and subsequently approved by USEPA on March 18, 2004.

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## Region 4

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**Water Segment:** Trancas Beach (Broad Beach)

**Pollutant:** Fecal Coliform

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

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## Region 4

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**Water Segment:** Tujunga Wash (LA River to Hansen Dam)

**Pollutant:** Ammonia

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

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

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* WA - Warm Freshwater Habitat

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004.

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## Region 4

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**Water Segment:** Venice Beach

**Pollutant:** Coliform Bacteria

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

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## Region 4

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**Water Segment:** Ventura River Estuary

**Pollutant:** Total Coliform

**Decision:** Do Not 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. A large number of samples exceed Basin Plan and Ocean Plan total coliform water quality objectives.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 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-four of 37 samples exceeded the Basin Plan 1,000/100ml geometric mean limit water quality objective, and 32 of 37 and 37 of 37 samples exceed the median density limit and the 10 percent limit Ocean Plan shellfish harvesting standards respectively, and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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**Numeric Line of Evidence** Pollutant-Water

**Beneficial Use:** R1 - Water Contact Recreation, SH - Shellfish Harvesting

**Matrix:** Water

**Water Quality Objective/  
Water Quality Criterion:** Basin Plan: In waters designated for marine water contact recreation (REC-1), the total coliform density shall not exceed the geometric mean limit of 1,000/100 ml.

Ocean Plan: In all waters where shellfish can be harvested for human consumption (SHELL), the median total coliform concentration throughout the water column shall not exceed 70/100 ml, nor shall more than ten percent of the

	samples collected exceed 230/100 ml.
<i>Data Used to Assess Water Quality:</i>	Numeric data generated from 37 bacteria samples out of which 24 exceeded the Basin Plan marine waters 1000/100ml geometric mean limit, 32 exceeded the Ocean Plan's shellfish harvesting median density standard of 70/100ml and the 37 exceeded 10 percent limit of 230/100ml (SWRCB, 2003).
<i>Spatial Representation:</i>	One sampling site.
<i>Temporal Representation:</i>	Collected during different seasons and years.
<i>Data Quality Assessment:</i>	Ojai Valley River Volunteer Monitoring Program.

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## Region 4

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**Water Segment:** Wheeler Canyon/Todd Barranca

**Pollutant:** Nitrate and Nitrite

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* MU - Municipal & Domestic

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Clara Rive Nitrogen TMDL was approved by RWQCB on August 7, 2003 and subsequently approved by USEPA on March 18, 2004.

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## Region 4

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**Water Segment:** Wheeler Canyon/Todd Barranca

**Pollutant:** Sulfates

**Decision:** Do Not Delist

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

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 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 12 samples exceeded the sulfate site specific water quality objective. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards are exceeded and it cannot be determined if applicable water quality standards are attained because there are an insufficient number of total samples.

**Lines of Evidence:**

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	AG - Agricultural Supply
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: 650 mg/L (Table 3-8, water body tributary to Santa Clara River Reach 3 between Freeman Diversion and Fillmore Street A).
<i>Data Used to Assess Water Quality:</i>	There were twelve water samples, with 11 samples exceeding the objective (SWRCB, 2003).

*Spatial Representation:* Represents creek.  
*Temporal Representation:* Quarterly sampling events.  
*Data Quality Assessment:* United Water Conservation District data quality assessment.

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## Region 4

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**Water Segment:** Wheeler Canyon/Todd Barranca

**Pollutant:** Total Dissolved Solids

**Decision:** Do Not Delist

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

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 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 12 samples exceeded the site specific TDS water quality objective. At least 26 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and it cannot be determined if applicable water quality standards are attained because there are insufficient numbers of samples.

**Lines of Evidence:**

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	AG - Agricultural Supply
<i>Matrix:</i>	-N/A
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: 1,300 mg/L (Table 3-8, water body tributary to Santa Clara River Reach 3 between Freeman Diversion and Fillmore Street A).
<i>Data Used to Assess Water Quality:</i>	There were twelve water samples, with all 12 samples exceeding the objective (SWRCB, 2003).

*Spatial Representation:* Represents creek.  
*Temporal Representation:* Quarterly sampling events.  
*Data Quality Assessment:* United Water Conservation District  
*QA/QC Equivalent:* United Water Conservation District methods used.

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## Region 4

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**Water Segment:** Will Rogers Beach

**Pollutant:** Coliform Bacteria

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* R1 - Water Contact Recreation

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Santa Monica Bay Bacteria Dry Weather TMDL was approved by RWQCB on January 24, 2002 and subsequently approved by USEPA. The Santa Monica Bay Bacteria Wet Weather TMDL was approved by RWQCB on December 12, 2004 and approved by USEPA on June 19, 2003.

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Fact Sheets Supporting  
“Do Not Delist” Recommendations



September 2005



## Region 5

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**Water Segment:** American River, Lower (Nimbus Dam to confluence with Sacramento River)

**Pollutant:** Mercury

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.4 of the Listing Policy. Under section 4.4 two lines of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.4, a health advisory has been issued by OEHHA for this water. Tissue samples from multiple species were collected, were considered representative and determined to exceed OEHHA criteria.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. A health advisory is available and fish in the water exceed OEHHA guidelines. The samples had sufficient sample size (more than 9 fish per species) of legal/edible size fish to be considered representative of mercury levels in those species, thereby allowing adequate estimation of the health risks associated with their consumption.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:**

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***Numeric Line of Evidence***

Health Advisories

***Beneficial Use:***

CM - Commercial and Sport Fishing (CA)

***Matrix:***

Tissue

***Water Quality Objective/  
Water Quality Criterion:***

Fish consumption health advisory issued by OEHHA in September 2004.

<i>Evaluation Guideline:</i>	OEHHA guidance tissue levels for mercury (Brodberg & Pollock, 1999).
<i>Data Used to Assess Water Quality:</i>	USGS and UCD collected a total of 11 fish species by electrofishing equipment or gill nets in August 2000, from September to October 2002, and in July 2003, at several sites in Lake Natoma, including the vicinity of Negro Bar and Mississippi Bar, the mouths of Willow Creek and Alder Creek, Natomas Slough, and near Nimbus Dam (Saiki et al., 2004; Alpers et al., 2004; Klasing, S. and R. Brodberg, 2004). Species collected included largemouth bass, smallmouth bass, spotted bass, channel catfish, white catfish, brown bullhead, black bullhead, redear sunfish, green sunfish, bluegill, and rainbow trout. Fish were measured and weighed; boneless and skinless individual fillets were submitted to University of California - Davis (the August 2000, and July 2003, samples) or the USGS Columbia Environmental Research Center (CERC) in Columbia, Missouri (the September to October, 2002, samples) for total mercury analyses by atomic absorption spectrophotometry using either a Perkin Elmer Flow Injection Mercury System or a Milestone DMA-80 analyzer. Under TSMP, the California Department of Fish and Game (CDFG) collected largemouth bass (n= 15 in three composites), pike minnow (n= 16 in three composites), and sucker samples (n = 35 in nine composites) by electrofishing equipment or gill nets in 1979-1983, 1987, and 1990-1993 near the Highway 160 and Watt Avenue bridges on the lower American River. Fish were measured and weighed and made into composites using skinoff muscle fillet. Composite samples were homogenized at the CDFG Water Pollution Control Laboratory and analyzed for total mercury by cold vapor atomic absorption spectrophotometry (TSMP, 2002). For the Sacramento River Watershed Program, largemouth bass (n = 26 in seven composites), striped bass (n = 1), pike minnow (n = 25 in five composites), sucker (n = 35 in seven composites), white catfish (n = 9 in two composites), and redear sunfish (n = 10 in two composites) were collected by electroshock, nets, or hook and line from 1997 to 2002 at known fishing locations on the lower American River from Sunrise Avenue to Discovery Park. Fish were measured and weighed and made into composites using skin-off muscle fillet. Composite samples were homogenized at Moss Landing Marine Laboratory and analyzed for total mercury using a Perkin Elmer Flow Injection Mercury System.
<i>Spatial Representation:</i>	Sample locations included Lake Natoma at Willow Creek, Mississippi Bar, Nimbus Dam, Alder Creek, Natomas Slough and Negro Bar; on the American River samples were taken at Discovery Park, d/s Watt Ave. bridge, and at Sunrise.
<i>Temporal Representation:</i>	Collection dates for USGS and UCD sampling data from Lake Natoma ranged from Aug. 2000, Sept. and Oct. 2002, and July 2003. SRWP data was collected in 1997, 1998, 1999, 2000, and 2001. Additionally, composite fish samples were collected as part of TSMP and SRWP, periodically from 1978 until 2002, from sections of the lower American River. Only mercury data were considered for this advisory.
<i>Environmental Conditions:</i>	Of the samples collected at Lake Natoma and the lower American River, largemouth bass (n = 64), bluegill (n = 78), pike minnow (n = 41), sucker (n = 70), channel catfish (n =11), white catfish (n = 10) and redear sunfish (n = 20) had sufficient sample size ( $\geq 9$ fish per species) of legal/edible size fish to be considered representative of mercury levels in those species, thereby allowing adequate estimation of the health risks associated with their consumption.

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*Line of Evidence*

Pollutant-Tissue

*Beneficial Use*

CM - Commercial and Sport Fishing (CA)

*Information Used to Assess  
Water Quality:*

Supporting documentation - Fish consumption study documenting overlaps of fishing intensities with mercury concentrations in fish. Concentrations >0.3 ppm have been measured in largemouth bass, Smallmouth and white bass, Sacramento pike minnow, Suckers sampled from the following American River.

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## Region 5

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**Water Segment:** Arcade Creek

**Pollutant:** Chlorpyrifos

**Decision:** Do Not Delist

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

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

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 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 CDFG 4-day average (14 ng/L) and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy.

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

### Lines of Evidence:

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*Numeric Line of Evidence*

Pollutant-Water

*Beneficial Use:*

CO - Cold Freshwater Habitat, WA - Warm Freshwater Habitat

*Matrix:*

Water

*Water Quality Objective/  
Water Quality Criterion:*

The narrative pesticide objectives state, in part:

- No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses,
- Discharges shall not result in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses,
- Pesticide concentrations shall not exceed those allowable by applicable antidegradation policies, and
- Pesticide concentrations shall not exceed the lowest levels technically and economically achievable.

The Basin Plans narrative water quality objective for toxicity states that, ...all waters shall be maintained free of toxic substances in concentrations that



produce detrimental physiological responses in human, plant, animal, or aquatic life.

*Evaluation Guideline:*

CDFG Hazard Assessment Criteria - 14 ng/L 4-day average.

*Data Used to Assess Water Quality:*

Chlorpyrifos was detected 40 percent of the time at levels above the CDFG aquatic life water quality criterion for chlorpyrifos - 0.020 ug/L (Spector et al., 2004). Ten samples were collected in 2003 in Arcade Creek at Watt Ave.; two exceeded the CDFG 4-day average.

*Spatial Representation:*

The Arcade Creek surface water-sampling site (C1) is located at Watt Avenue, near the USGS Arcade Creek near Del Paso Heights flow gage. Rainwater samples were collected at Arcade Creek at Greenback Lane.

Samples were collected beneath the water surface as near as possible to the center of the stream when water levels were low or when access was only possible from the bank. Otherwise, three to four grab samples were collected as one integrated grab sample.

*Temporal Representation:*

Storm events were sampled during the orchard dormant spray season months of January and February 2001 and 2002, and January through April 2003, to determine pesticide concentrations in rain and creeks during and after the orchard dormant spray season.

*Environmental Conditions:*

Typical dry weather flows in Arcade Creek are less than 1 cubic foot per second (cfs), but, during rainfall events, storm runoff into Arcade Creek can create flows of over 2,200 cfs, as measured at the USGS gage station located at Watt Avenue.

*Data Quality Assessment:*

San Joaquin River TMDL Quality Assurance Project Plan.

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## Region 5

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**Water Segment:** Arcade Creek

**Pollutant:** Diazinon

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under sections 4.6 and 4.10 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess delisting status while under section 4.10, a minimum of two lines of evidence are needed to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant pesticide toxicity and the pollutant concentration exceeds the pesticide water quality objective.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 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 CDFG 1 hour criteria. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

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

### Lines of Evidence:

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**Numeric Line of Evidence** Pollutant-Water

**Beneficial Use:** CO - Cold Freshwater Habitat, WA - Warm Freshwater Habitat

**Matrix:** Water

**Water Quality Objective/  
Water Quality Criterion:** The narrative pesticide objectives state, in part:

- No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses,
- Discharges shall not result in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses,
- Pesticide concentrations shall not exceed those allowable by applicable antidegradation policies, and
- Pesticide concentrations shall not exceed the lowest levels technically and

economically achievable.

The Basin Plans narrative water quality objective for toxicity states that 'all waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life'.

*Evaluation Guideline:*

CDFG Hazard Assessment Criteria 0.16 ug/L 1-hour average.

*Data Used to Assess Water Quality:*

Ninety percent of the time during the 2001-2002 sampling period, diazinon concentrations at the Arcade Creek site were greater than the CDFG aquatic life water quality criterion for diazinon. In 2003, 10 samples were taken; 3 exceeded the CDFG criteria (Spector et al., 2004).

*Spatial Representation:*

The Arcade Creek surface water-sampling site (C1) is located at Watt Avenue, near the USGS Arcade Creek near Del Paso Heights flow gage. Rainwater samples were collected at Arcade Creek at Greenback Lane.

Samples were collected beneath the water surface as near as possible to the center of the stream when water levels were low or when access was only possible from the bank. Otherwise, three to four grab samples were collected as one integrated grab sample.

*Temporal Representation:*

Storm events were sampled during the orchard dormant spray season months of January and February 2001 and 2002, and January through April 2003, to determine pesticide concentrations in rain and creeks during and after the orchard dormant spray season.

*Environmental Conditions:*

Typical dry weather flows in Arcade Creek are less than 1 cubic foot per second (cfs), but, during rainfall events, storm runoff into Arcade Creek can create flows of over 2,200 cfs, as measured at the USGS gage station located at Watt Avenue.

*Data Quality Assessment:*

San Joaquin River TMDL Quality Assurance Project Plan.

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***Numeric Line of Evidence***

Pollutant-Water

*Beneficial Use:*

CO - Cold Freshwater Habitat, WA - Warm Freshwater Habitat

*Matrix:*

Water

*Water Quality Objective/  
Water Quality Criterion:*

Pesticide concentrations shall not exceed those allowable by applicable antidegradation policies (see State Water Resources Control Board Resolution No. 68-16 and 40 C.F.R. Section 131.12). Pesticide concentrations shall not exceed the lowest levels technically and economically achievable. A trend in declining water quality has not been established per the Policy in section 3.1.10.

No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. Discharges shall not result in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses. Total identifiable persistent chlorinated hydrocarbon pesticides shall not be present in the water column at concentrations detectable within the accuracy of analytical methods approved by the Environmental Protection Agency or the executive Officer. Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of pesticides in excess of the Maximum Contaminant Levels set forth in California Code of Regulations, Title 22, Division 4, Chapter 15.

<i>Evaluation Guideline:</i>	Diazinon - CDFG Hazard Assessment Criteria - 0.10 ug/L 4-day average and 0.16 ug/L 1-hour average (Siepmann & Finlayson, 2002).
<i>Data Used to Assess Water Quality:</i>	Analysis methods used includes ELISA, GC, Gas or Liquid chromatograph in the EPA 8140 scan, EPA 8141A, GC/MS. All 22 samples at Del Paso Heights exceeded the CDFG 4-day average and 1-hour average. Out of 65 samples taken at Norwood Avenue, 46 exceeded the CDFG 1-hour average and 2 exceeded the 4 day average (USGS, 2005).
<i>Spatial Representation:</i>	Samples were taken at Arcade Creek at Norwood Ave and near Del Paso Heights.
<i>Temporal Representation:</i>	Samples for the Del Paso Heights were taken in 1996 (2x); 1997 (2/month for the year); and 1998 (1/month for the first 4 months). Samples at the Norwood Ave. site were taken in 1996 (2); 1997 (1/month 1-6); 1998-99 (1/month x 12); 2000 (2/12 months); 2001(7 samples) and 2002 (3 samples).
<i>Data Quality Assessment:</i>	Data from USGS reports are considered of adequate quality per section 6.1.4 of the Policy.

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## Region 5

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**Water Segment:** Bear River, Lower (below Camp Far West Reservoir)

**Pollutant:** Diazinon

**Decision:** Do Not 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. Some of the data was questionable due to a possible bias (higher diazinon conc) from the ELISA method and as such could not be used in this assessment. Therefore, the data can not be used to make a delisting decision.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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 does not 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. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### **Lines of Evidence:**

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*Line of Evidence* Pollutant-Water

*Beneficial Use* CO - Cold Freshwater Habitat

*Non-Numeric Objective:* No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. Discharges shall not result in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses. Total identifiable persistent chlorinated hydrocarbon pesticides shall not be present in the water column at concentrations detectable within the accuracy of analytical methods approved by the Environmental Protection Agency or the executive Officer. Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of pesticides in excess of the Maximum Contaminant Levels set forth in California Code of Regulations, Title 22, Division 4, Chapter 15.

*Evaluation Guideline:* CDFG Hazard Assessment Criteria - 0.10 ug/L 4-day average and 0.16 ug/L 1-hour average

*Data Used to Assess Water Quality:*

None of the concentrations from the 30 samples from this site exceeded the CDFG criteria but some of the data was questionable due to a possible bias (higher diazinon conc) from the ELISA method. Data was obtained from the U.S. Geological Survey Water-Resources Investigations Report 02-4101. Samples were analyzed using GC/ECD/TSD and ELISA.

*Spatial Representation:*

Samples were taken on the Bear River at Berry Road.

*Temporal Representation:*

Samples were collected in January/February 2000, 2001.

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## Region 5

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**Water Segment:** Bear River, Upper

**Pollutant:** Mercury

**Decision:** Do Not 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 sections 4.1 and 4.5 single lines of evidence are necessary to assess listing status.

Three lines of evidence is available in the administrative record to assess this pollutant. For water, none of the samples exceed the water quality criterion or MCL. All samples exceed the guideline for tissue.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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. For tissue, all the samples exceed the guideline. For water, none of 75 samples exceeded the USEPA CTR criterion. None of the 75 samples exceeded the Drinking Water MCL.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

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

### **Lines of Evidence:**

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***Numeric Line of Evidence***

Pollutant-Tissue

***Beneficial Use:***

CO - Cold Freshwater Habitat, MU - Municipal & Domestic

***Matrix:***

Tissue

***Water Quality Objective/  
Water Quality Criterion:***

All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.

***Evaluation Guideline:***

OEHHA guideline used (0.3 mg/kg) (Brodberg and Pollock, 1999).

***Data Used to Assess Water  
Quality:***

Three fish were collected. Tissue concentrations ranged from 0.38 to 0.40 ppm. All exceeded the objective (SWRCB, 2003).

***Spatial Representation:***

All the fish were collected at Dog Bar Road.

***Temporal Representation:***

All fish were collected on September 23, 1999.

*Data Quality Assessment:* All samples were collected using USGS methods and quality control.

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***Numeric Line of Evidence*** Pollutant-Water  
*Beneficial Use:* CO - Cold Freshwater Habitat, MU - Municipal & Domestic  
*Matrix:* Water  
*Water Quality Objective/  
Water Quality Criterion:* Drinking Water MCL Title 22 Primary (0.002 mg/L).  
*Data Used to Assess Water  
Quality:* None of the 25 samples from Bear Creek exceeded the Drinking Water MCL value (USGS, 2005).  
*Spatial Representation:* Twenty-five samples were taken at each of the following locations on the Bear River: below Rollins Reservoir; below Wolf Creek; below Steep Hollow Creek.  
*Temporal Representation:* Samples were taken monthly beginning in August 2000 at Wolf Creek; in July 2001 below Rollins Reservoir and below Steep Hollow Creek and ending June 2003.  
*Data Quality Assessment:* Data from USGS reports are considered of adequate quality per section 6.1.4 of the Policy.

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***Numeric Line of Evidence*** Pollutant-Water  
*Beneficial Use:* CO - Cold Freshwater Habitat, MU - Municipal & Domestic  
*Matrix:* Water  
*Water Quality Objective/  
Water Quality Criterion:* CTR value: 50 ng/L.  
*Data Used to Assess Water  
Quality:* None of the 25 samples exceeded the CTR acute and chronic values (USGS 2005).  
*Spatial Representation:* Twenty-five samples were taken at each of the following locations on the Bear River: below Rollins Reservoir; below Wolf Creek; below Steep Hollow Creek.  
*Temporal Representation:* Samples were taken monthly beginning in August 2000 at Wolf Creek; beginning in July 2001 below Rollins Reservoir and below Steep Hollow Creek and ending June 2003.  
*Data Quality Assessment:* Data from USGS reports are considered of adequate quality per section 6.1.4 of the Policy.

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## Region 5

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**Water Segment:** Butte Slough

**Pollutant:** Diazinon

**Decision:** Do Not 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. Several of the samples exceed the water quality objective but some of the data was questionable due to a possible bias (higher diazinon conc) from the ELISA method and as such could not be used in this assessment. Out of 91 samples, 15 were considered to be "questionable". Of the 15 "questionable" samples, none were in exceedance and these were not used when assessing this water body for this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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. Twenty of the 76 samples exceeded the CDFG Hazard Assessment Criteria, and this exceeds the allowable frequency presented in Table 4.1 of the Listing Policy. Additionally, when the chronic criteria could be applied, 4 out of 12 data set averages (4-day) exceeded the chronic criteria.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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**Line of Evidence** Pollutant-Water

**Beneficial Use** CO - Cold Freshwater Habitat, MI - Fish Migration, R1 - Water Contact Recreation, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

**Non-Numeric Objective:** No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. Discharges shall not result in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses. Total identifiable persistent chlorinated hydrocarbon pesticides shall not be present in the water column at concentrations detectable within the

accuracy of analytical methods approved by the Environmental Protection Agency or the executive Officer. Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of pesticides in excess of the Maximum Contaminant Levels set forth in California Code of Regulations, Title 22, Division 4, Chapter 15.

*Evaluation Guideline:*

CDFG Hazard Assessment Criteria - 0.16 ug/L 1-hour average (acute), 0.10 ug/L 4-day average (chronic) (Siepmann & Finlayson, 2002).

*Data Used to Assess Water Quality:*

There were 91 samples taken, 20 were in exceedance. All 20 exceedances were from the 1994 data. Some of the more recent data was "questionable" due to a possible bias (higher diazinon conc) from the ELISA method and as such could not be used in this assessment. When the chronic criteria could be applied, 4 out of 12 data set averages (4-day) exceeded the chronic criteria (Dileanis, 2002, Dileanis, 2002a, Dileanis, 2003b, Holmes et al., 2000).

*Spatial Representation:*

Samples were taken in Butte Slough at Lower Pass Road, Pass Road and Mawson Bridge near Colusa.

*Temporal Representation:*

Samples were collected in 1994 and from 2000 to 2002 (There were no samples taken between 1994 and 2000).

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## Region 5

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**Water Segment:** Colusa Basin Drain

**Pollutant:** Diazinon

**Decision:** Do Not Delist

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

Three lines of evidence are available in the administrative record to assess this pollutant. Samples taken as late as February 2004 exceeded the CDFG criteria.

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

This conclusion is based on the staff findings that:

1. The CDFG criterion used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Thirteen of 129 samples exceeded the CDFG criterion, and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy. Additionally, when the chronic criteria could be applied, 2 out of 9 data set averages (4-day) exceeded the chronic criteria.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:**

<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<i>Beneficial Use:</i>	CO - Cold Freshwater Habitat, WA - Warm Freshwater Habitat
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. Discharges shall not result in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses. Total identifiable persistent chlorinated hydrocarbon pesticides shall not be present in the water column at concentrations detectable within the accuracy of analytical methods approved by the Environmental Protection Agency or the executive Officer. Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of pesticides in excess of the Maximum Contaminant Levels set forth in California Code of Regulations, Title 22, Division 4, Chapter 15.
<i>Evaluation Guideline:</i>	CDFG Hazard Assessment Criterion - 0.16 ug/L 1-hour average (acute), 0.10 ug/L 4-day average (chronic) (Siepmann & Finlayson, 2002).
<i>Data Used to Assess Water Quality:</i>	Two of 14 samples exceeded the CDFG acute criteria. None of 8 samples exceeded the chronic criteria (Calanchini et al., 2004).
<i>Spatial Representation:</i>	Samples taken at Colusa Basin Drain near Knight's Landing.
<i>Temporal Representation:</i>	Two storm events were sampled for the 2004 TMDL project in the Sacramento River Basin. The first storm event (Storm 1) was the period 28 January to 6 February 2004. The second storm event (Storm 2) was the period 15-23 February, 2004. For storm 1 sampling was conducted from 28 January to 3 February at most sites, and as late as 6 February at the Tower Bridge at Sacramento site. For storm 2 the sampling period began on 16 February and extended until 22 February.
<i>Data Quality Assessment:</i>	Data from CDFA laboratories are considered of adequate quality.

<b><i>Line of Evidence</i></b>	Pollutant-Water
<i>Beneficial Use</i>	CO - Cold Freshwater Habitat, WA - Warm Freshwater Habitat
<i>Non-Numeric Objective:</i>	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. Discharges shall not result in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses. Total identifiable persistent chlorinated hydrocarbon pesticides shall not be present in the water column at concentrations detectable within the accuracy of analytical methods approved by the Environmental Protection Agency or the executive Officer. Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of pesticides in excess of the Maximum Contaminant Levels set forth in California Code of Regulations, Title 22, Division 4, Chapter 15.
<i>Evaluation Guideline:</i>	CDFG Hazard Assessment Criterion: 0.16 ug/L 1-hour average (acute), 0.10 ug/L 4-day average (Siepmann & Finlayson, 2002).
<i>Data Used to Assess Water Quality:</i>	Data analysis consisted of ELISA and GC/ECD/TSD. Nine samples were considered of "questionable" quality due to a possible bias (higher diazinon conc) from the ELISA method. Data from 1996-98 was from the NWIS Web data for the nation. Therefore, these samples were not included as part of this assessment. Of the remaining 115 samples, 11 exceeded the acute criteria. When the chronic criteria could be applied, 2 out of 9 data set averages (4-day)

exceeded the chronic criteria (Dileanis et al., 2002).

*Spatial Representation:*

Samples taken at Colusa Basin Drain at Road 99E near Knights Landing and Clarks Ditch.

*Temporal Representation:*

Samples taken in 2000. Additional samples taken from 1996-1998. Samples from 1999-2003 resulted in non-detects based on EPA 8141A analysis methodology. Samples in 1994 taken in Feb. from Clarks Ditch, trib. to Colusa Basin Drain.

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## Region 5

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**Water Segment:** Elder Creek

**Pollutant:** Chlorpyrifos

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. A 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 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. Five of 40 samples exceeded the CDFG criteria; all five samples taken in 2001 were non-detects; in 2003, 70 percent of the detections were above the CDFG criterion (14 ng/L) and this exceeds 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 not be removed from 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:

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**Numeric Line of Evidence** Pollutant-Water

**Beneficial Use:** CO - Cold Freshwater Habitat, WA - Warm Freshwater Habitat

**Matrix:** Water

**Water Quality Objective/  
Water Quality Criterion:** The narrative pesticide objectives state, in part:

- No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses,
- Discharges shall not result in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses,
- Pesticide concentrations shall not exceed those allowable by applicable antidegradation policies, and
- Pesticide concentrations shall not exceed the lowest levels technically and economically achievable.

The Basin Plans narrative water quality objective for toxicity states that all waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.

*Evaluation Guideline:*

CDFG Hazard Assessment Criteria - 14 ng/L 4-day average.

*Data Used to Assess Water Quality:*

In 2001 and 2003, Regional Board staff monitored the segment of Elder Creek that runs adjacent to a 250-acre commercial nursery to better characterize nursery contributions of pesticides to Elder Creek, a tributary of Morrison Creek. Five samples were taken in 2001; all were non-detects. In 2003, chlorpyrifos concentrations at the Elder Creek downstream monitoring site (downstream of a 250-acre commercial nursery) were the highest overall, with 70 percent of the chlorpyrifos detections above the CDFG aquatic life water quality criterion for chlorpyrifos (0.020 ug/L). From mid-March to mid-April 2003, chlorpyrifos concentrations in samples collected from the downstream Elder Creek monitoring site were consistently high (ranging from 0.035 ug/L to 0.320 ug/L) while samples collected from the upstream Elder Creek monitoring site had non-detectable chlorpyrifos concentrations 80 percent of the time. 20 samples were taken at two locations; 5 samples at the Bradshaw Road site exceeded the CDFG criteria (Spector et al., 2004).

*Spatial Representation:*

Samples were collected beneath the water surface as near as possible to the center of the stream when water levels were low or when access was only possible from the bank. Otherwise, three to four grab samples were collected as one integrated grab sample. Elder Creek was monitored by Regional Board staff at two locations in 2003 - upstream and downstream of Village Nursery at Excelsior Road and Bradshaw Road. In 2001, Regional Board staff monitored Elder Creek at three sites, Elder Creek Road, Elk Grove-Florin Road, and Franklin Boulevard.

*Temporal Representation:*

Storm events were sampled during the orchard dormant spray season months of January and February 2001 and 2002, and January through April 2003, to determine pesticide concentrations in rain and creeks during and after the orchard dormant spray season.

*Data Quality Assessment:*

During each monitoring season, additional samples were collected for quality assurance/quality control (QA/QC) purposes. Four types of quality assurance samples were collected to confirm the integrity of analytical results reported in this three-year monitoring study. The QA/QC samples included sample duplicates, equipment blanks, matrix spikes, and matrix spike duplicates. The procedures used for collecting the QA/QC samples are based on the San Joaquin River TMDL Quality Assurance Project Plan. During this 2001-2003 study, approximately 15-25 percent of the samples collected were either equipment blanks, sample duplicates, or matrix spikes and matrix spike duplicates.

## Region 5

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**Water Segment:** Elder Creek

**Pollutant:** Diazinon

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. 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 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. One of 25 samples exceeded the CDFG criteria but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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**Numeric Line of Evidence** Pollutant-Water

**Beneficial Use:** CO - Cold Freshwater Habitat, WA - Warm Freshwater Habitat

**Matrix:** Water

**Water Quality Objective/  
Water Quality Criterion:** The narrative pesticide objectives state, in part:  
- No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses,  
- Discharges shall not result in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses,  
- Pesticide concentrations shall not exceed those allowable by applicable antidegradation policies, and  
- Pesticide concentrations shall not exceed the lowest levels technically and economically achievable.

The Basin Plans narrative water quality objective for toxicity states that all



waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.

*Evaluation Guideline:*

CDFG Hazard Assessment Criteria 0.16 ug/L 1-hour average.

*Data Used to Assess Water Quality:*

In 2001 and 2003, Regional Board staff monitored the segment of Elder Creek that runs adjacent to a 250-acre commercial nursery to better characterize nursery contributions of pesticides to Elder Creek, a tributary of Morrison Creek. Diazinon concentrations were low to non-detectable at the upstream and downstream Elder Creek monitoring sites. Five samples were taken in 2001 at three locations; one of the samples taken at Franklin Blvd. exceeded the CDFG criteria. In 2003, 20 samples were taken at two locations; none of the samples exceeded the CDFG criteria (Spector et al., 2004).

*Spatial Representation:*

Samples were collected beneath the water surface as near as possible to the center of the stream when water levels were low or when access was only possible from the bank. Otherwise, three to four grab samples were collected as one integrated grab sample. Elder Creek was monitored by Regional Board staff at two locations in 2003 - upstream and downstream of Village Nursery at Excelsior Road and Bradshaw Road. In 2001, Regional Board staff monitored Elder Creek at three sites, Elder Creek Road, Elk Grove-Florin Road, and Franklin Boulevard.

*Temporal Representation:*

Storm events were sampled during the orchard dormant spray season months of January and February 2001 and 2002, and January through April 2003, to determine pesticide concentrations in rain and creeks during and after the orchard dormant spray season.

*Data Quality Assessment:*

During each monitoring season, additional samples were collected for quality assurance/quality control (QA/QC) purposes. Four types of quality assurance samples were collected to confirm the integrity of analytical results reported in this three-year monitoring study. The QA/QC samples included sample duplicates, equipment blanks, matrix spikes, and matrix spike duplicates. The procedures used for collecting the QA/QC samples are based on the San Joaquin River TMDL Quality Assurance Project Plan. During this 2001-2003 study, approximately 15-25 percent of the samples collected were either equipment blanks, sample duplicates, or matrix spikes and matrix spike duplicates.

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## Region 5

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**Water Segment:** Elk Grove Creek

**Pollutant:** Diazinon

**Decision:** Do Not 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. Two of the samples exceed the water quality objective but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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. Four of the 6 samples exceeded the CDFG criterion. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy, but with 4 exceedances you would need a minimum of 48 samples in order to delist.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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**Numeric Line of Evidence** Pollutant-Water

**Beneficial Use:** CO - Cold Freshwater Habitat, WA - Warm Freshwater Habitat

**Matrix:** Water

**Water Quality Objective/  
Water Quality Criterion:** The narrative pesticide objectives state, in part:  
- No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses,  
- Discharges shall not result in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses,  
- Pesticide concentrations shall not exceed those allowable by applicable antidegradation policies, and

- Pesticide concentrations shall not exceed the lowest levels technically and economically achievable.

The Basin Plans narrative water quality objective for toxicity states that all waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.

*Evaluation Guideline:*

CDFG Hazard Assessment Criteria 0.16 ug/L 1-hour average (Siepmann & Finlayson, 2002).

*Data Used to Assess Water Quality:*

Samples were collected beneath the water surface as near as possible to the center of the stream when water levels were low or when access was only possible from the bank. Otherwise, three to four grab samples were collected as one integrated grab sample.

In 2001, 6 samples were taken at 3 sampling sites; 2 samples at Waterman Road were non-detects; the 2 samples taken at Emerald Vista Drive and Florin Creek at Franklin Blvd. exceeded the CDFG criteria (Spector et al., 2004).

*Spatial Representation:*

In 2001, Elk Grove Creek was monitored by the Regional Board at two sites - at Waterman Road and at Emerald Vista Drive.

*Temporal Representation:*

Storm events were sampled during the orchard dormant spray season months of January and February 2001 and 2002, and January through April 2003, to determine pesticide concentrations in rain and creeks during and after the orchard dormant spray season.

*Data Quality Assessment:*

San Joaquin River TMDL Quality Assurance Project Plan.

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## Region 5

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<b>Water Segment:</b>	Harding Drain (Turlock Irrigation District Lateral #5)
<b>Pollutant:</b>	Ammonia
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	The data and information in the administrative record does not support this change. A UAA has not been submitted to USEPA.
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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<i>Line of Evidence</i>	Testimonial Evidence
<i>Beneficial Use</i>	AG - Agricultural Supply
<i>Data Used to Assess Water Quality:</i>	Letter submitted on behalf of Turlock Irrigation District requesting Harding Drain to be delisted for ammonia due to a UAA that was completed.

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## Region 5

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<b>Water Segment:</b>	Harding Drain (Turlock Irrigation District Lateral #5)
<b>Pollutant:</b>	Chlorpyrifos
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	The data and information in the administrative record does not support this change. A UAA has not been submitted to USEPA.
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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<i>Line of Evidence</i>	Testimonial Evidence
<i>Beneficial Use</i>	AG - Agricultural Supply
<i>Data Used to Assess Water Quality:</i>	Letter submitted on behalf of Turlock Irrigation District requesting Harding Drain to be delisted for chlorpyrifos due to a UAA that was completed.

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## Region 5

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<b>Water Segment:</b>	Harding Drain (Turlock Irrigation District Lateral #5)
<b>Pollutant:</b>	Diazinon
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	The data and information in the administrative record does not support this change. A UAA has not been submitted to USEPA.
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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<i>Line of Evidence</i>	Testimonial Evidence
<i>Beneficial Use</i>	AG - Agricultural Supply
<i>Data Used to Assess Water Quality:</i>	Letter submitted on behalf of Turlock Irrigation District requesting Harding Drain to be delisted for diazinon due to a UAA that was completed.

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## Region 5

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<b>Water Segment:</b>	Harding Drain (Turlock Irrigation District Lateral #5)
<b>Pollutant:</b>	Unknown Toxicity
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	The data and information in the administrative record does not support this change. A UAA has not been approved by USEPA.
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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<i>Line of Evidence</i>	Testimonial Evidence
<i>Beneficial Use</i>	AG - Agricultural Supply
<i>Data Used to Assess Water Quality:</i>	Letter submitted on behalf of Turlock Irrigation District requesting Harding Drain to be delisted for unknown toxicity due to a UAA that was completed.

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## Region 5

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**Water Segment:** Jack Slough

**Pollutant:** Diazinon

**Decision:** Do Not Delist

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

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

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification 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 24 out of 54 samples that exceeded the CDFG Hazard Assessment Criteria and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. Additionally, when the chronic criteria could be applied, 6 out of 10 data set averages (4-day) exceeded the chronic criteria.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:**

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*Line of Evidence* Pollutant-Water

*Beneficial Use* AG - Agricultural Supply, WA - Warm Freshwater Habitat

*Non-Numeric Objective:* No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. Discharges shall not result in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses. Total identifiable persistent chlorinated hydrocarbon pesticides shall not be present in the water column at concentrations detectable within the accuracy of analytical methods approved by the Environmental Protection Agency or the executive Officer. Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of pesticides in excess of the Maximum Contaminant Levels set forth in California Code of Regulations, Title 22, Division 4, Chapter 15.



<i>Evaluation Guideline:</i>	CDFG Hazard Assessment Criteria 0.16 ug/L 1-hour average (acute), 0.10 ug/L 4-day average (chronic).
<i>Data Used to Assess Water Quality:</i>	There were 59 samples total taken. Of these, 16 were considered to be of "questionable" quality and were not used in this assessment. Of the remaining 43 samples, 20 exceeded the acute diazinon criteria (Dileanis et al., Dileanis, 2003b, Dileanis, 2003b, Holmes et al., 2000).
<i>Spatial Representation:</i>	Samples were collected in Marysville and at Doc Adams Road.
<i>Temporal Representation:</i>	Samples were taken late January/February during the years 1994, 2000, 2001 and 2002.

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## Region 5

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**Water Segment:** Orestimba Creek (above Kilburn Road)

**Pollutant:** Chlorpyrifos

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. One of the samples exceeded the pesticide water quality objective but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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 14 samples exceeded the CDFG Hazard Assessment Criteria. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

**Lines of Evidence:**

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***Numeric Line of Evidence***

Pollutant-Water

***Beneficial Use:***

AG - Agricultural Supply, CO - Cold Freshwater Habitat, MI - Fish Migration, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

***Matrix:***

Water

***Water Quality Objective/  
Water Quality Criterion:***

Pesticide concentrations shall not exceed those allowable by applicable antidegradation policies (see State Water Resources Control Board Resolution No. 68-16 and 40 CFR section 131.12).

No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. Discharges shall not result in pesticide concentrations in bottom sediments or aquatic life that adversely affect

beneficial uses. Total identifiable persistent chlorinated hydrocarbon pesticides shall not be present in the water column at concentrations detectable within the accuracy of analytical methods approved by the Environmental Protection Agency or the executive Officer. Pesticide concentrations shall not exceed the lowest levels technically and economically achievable. Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of pesticides in excess of the Maximum Contaminant Levels set forth in California Code of Regulations, Title 22, Division 4, Chapter 15.

<i>Evaluation Guideline:</i>	CDFG Hazard Assessment Criteria - 14 ng/L 4-day average and 25 ng/L 1-hour average.
<i>Data Used to Assess Water Quality:</i>	Chlorpyrifos was detected at concentrations exceeding toxicity benchmarks. Chlorpyrifos was detected in one sample at 0.0705 µg/L, and found at trace concentrations in one additional sample. The detection exceeds both the acute and chronic CDFG WQC (Starnier et al., 2003).
<i>Spatial Representation:</i>	Samples were taken on Orestimba Creek at River Road.
<i>Temporal Representation:</i>	Sampling began on July 2, 2002, and continued throughout the summer until September 30, 2002. Each site was sampled once per week.
<i>Environmental Conditions:</i>	At each sampling event, temperature, dissolved oxygen (DO), pH, and electrical conductivity (EC) were measured in situ at each sampling site. DO, EC and temperature were measured. The pH at Orestimba Creek ranged from 7.1 to 7.8. Measured water temperature ranged from 16 to 25.4 °C. DO and EC had ranges of 6.21 to 8.28 mg/L and 641 to 887 µS/cm, respectively.
<i>Data Quality Assessment:</i>	Quality Control (QC) for the chemical analysis portion of this study was conducted in accordance with Standard Operating Procedure QAQC001.00 (Segawa, 1995).

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## Region 5

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**Water Segment:** Orestimba Creek (above Kilburn Road)

**Pollutant:** Diazinon

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. One of the samples exceeded the water quality objective but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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 14 samples exceeded the pesticide water quality objective. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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***Numeric Line of Evidence*** Pollutant-Water

***Beneficial Use:*** AG - Agricultural Supply, CO - Cold Freshwater Habitat, MI - Fish Migration, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

***Matrix:*** Water

***Water Quality Objective/  
Water Quality Criterion:*** Pesticide concentrations shall not exceed those allowable by applicable antidegradation policies (see State Water Resources Control Board Resolution No. 68-16 and 40 CFC section 131.12).

No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. Discharges shall not result in pesticide concentrations in bottom sediments or aquatic life that adversely affect

beneficial uses. Total identifiable persistent chlorinated hydrocarbon pesticides shall not be present in the water column at concentrations detectable within the accuracy of analytical methods approved by the Environmental Protection Agency or the executive Officer. Pesticide concentrations shall not exceed the lowest levels technically and economically achievable. Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of pesticides in excess of the Maximum Contaminant Levels set forth in California Code of Regulations, Title 22, Division 4, Chapter 15.

*Evaluation Guideline:*

CDFG Hazard Assessment Criteria - 0.10 ug/L 4-day average and 0.16 ug/L 1-hour average (Siepmann & Finlayson, 1999).

*Data Used to Assess Water Quality:*

Diazinon was detected at concentrations exceeding toxicity benchmarks. Of the 14 samples collected at Orestimba Creek, diazinon was detected three times (21% detection frequency), with concentrations of 0.043, 0.046, and 0.276 µg/L. The two lowest detected concentrations were below the CDFG chronic WQC of 0.10 µg/L. The 0.276 µg/L detection exceeded both the chronic and the acute WQC. The three samples with quantifiable diazinon detections were taken from consecutive sampling events at Orestimba Creek (8/5, 8/12 - 10 - and 8/19, 2002) (Starner et al., 2003).

*Spatial Representation:*

Samples were taken on Orestimba Creek at River Road.

*Temporal Representation:*

Sampling began on July 2, 2002, and continued throughout the summer until September 30, 2002. Each site was sampled once per week.

*Environmental Conditions:*

At each sampling event, temperature, dissolved oxygen (DO), pH, and electrical conductivity (EC) were measured in situ at each sampling site. DO, EC and temperature were measured. The pH at Orestimba Creek ranged from 7.1 to 7.8. Measured water temperature ranged from 16 to 25.4 °C. DO and EC had ranges of 6.21 to 8.28 mg/L and 641 to 887 µS/cm, respectively.

*Data Quality Assessment:*

Quality Control (QC) for the chemical analysis portion of this study was conducted in accordance with Standard Operating Procedure QAQC001.00 (Segawa, 1995).

## Region 5

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**Water Segment:** Sacramento Slough

**Pollutant:** Diazinon

**Decision:** Do Not Delist

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

Two lines of evidence are available in the administrative record to assess this pollutant. Many of the measurements exceeded the guideline.

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

This conclusion is based on the staff findings that:

1. The CDFG criteria used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Of the 163 samples taken, 37 exceeded the CDFG acute criteria and this exceeds the allowable frequency of the Listing Policy.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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**Numeric Line of Evidence** Pollutant-Water

**Beneficial Use:** CO - Cold Freshwater Habitat

**Matrix:** Water

**Water Quality Objective/  
Water Quality Criterion:** Pesticide concentrations shall not exceed those allowable by applicable antidegradation policies (see State Water Resources Control Board Resolution No. 68-16 and 40 CFR section 131.12).

No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. Discharges shall not result in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses. Total identifiable persistent chlorinated hydrocarbon pesticides

shall not be present in the water column at concentrations detectable within the accuracy of analytical methods approved by the Environmental Protection Agency or the executive Officer. Pesticide concentrations shall not exceed the lowest levels technically and economically achievable. Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of pesticides in excess of the Maximum Contaminant Levels set forth in California Code of Regulations, Title 22, Division 4, Chapter 15.

<i>Evaluation Guideline:</i>	CDFG Hazard Assessment Criteria 0.16 ug/L 1-hour average (Siepmann & Finlayson, 2002).
<i>Data Used to Assess Water Quality:</i>	Twelve samples were taken; none exceeded the CDFG criteria (Spector et al., 2004).
<i>Spatial Representation:</i>	Seven sites were monitored in the Sacramento River Basin (samples here were recorded from Sacramento Slough). Isokinetic, depth integrated water samples were collected at 6-10 equally spaced points across the channel width with a USGS D-77 sampler using the equal-width-increment method (EWI). Samples were collected from a boat at Sacramento Slough.
<i>Temporal Representation:</i>	Sampling frequency for each storm event was one sample/day was taken for 7 days. Two storm events were sampled for the 2004 TMDL project in the Sacramento River Basin. The first storm event (Storm 1) was the period 28 January to 6 February 2004. The second storm event (Storm 2) was the period 15-23 February, 2004. For Storm 1 sampling was conducted from 28 January to 3 February at most sites, and as late as 6 February at the Tower Bridge at Sacramento site. For Storm 2 the sampling period began on 16 February and extended until 22 February.
<i>Data Quality Assessment:</i>	Sample quality control was measured through collection of sequential duplicates (n=8), blanks (n=5) and matrix spikes (n=5) (Table 3). The RPDs between environmental and duplicate sample concentrations of diazinon ranged from 0-40%.

<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<i>Beneficial Use:</i>	CO - Cold Freshwater Habitat
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. Discharges shall not result in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses. Total identifiable persistent chlorinated hydrocarbon pesticides shall not be present in the water column at concentrations detectable within the accuracy of analytical methods approved by the Environmental Protection Agency or the executive Officer.
<i>Evaluation Guideline:</i>	CDFG Hazard Assessment Criteria 0.16 ug/L 1-hour average, 0.10 ug/L 4-day average (chronic) (Siepmann & Finlayson, 2002).
<i>Data Used to Assess Water Quality:</i>	There were a total of 151 samples collected. Of these samples, 37 exceeded the CDFG acute criteria. When the chronic criteria could be applied, 9 out of 15 data set averages (4-day) exceeded the criteria (Dileanis, 2003a), (Dileanis, 2003b), (Holmes et al., 2000), (Foe et al., 1998), (LWA, 2002b, Larsen et al., 1998, List et al., 2002).

*Spatial Representation:* Samples were taken near Knights Landing, at Hwy 113, near Verona, at Karnak, and at sites identified as "Sac Slough".

*Temporal Representation:* Samples were collected from 1994 thru 2003.

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## Region 5

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**Water Segment:** Salt Slough (upstream from confluence with San Joaquin River)

**Pollutant:** Chlorpyrifos

**Decision:** Do Not 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. The second line of evidence is a Regional Board recommended map change approved by the SWRCB. One sample exceeds the water quality objective but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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 14 samples exceeded both the CDFG chronic and CDFG acute WQC. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. The map change is appropriate and should be made.

### Lines of Evidence:

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**Numeric Line of Evidence** Pollutant-Water

**Beneficial Use:** AG - Agricultural Supply, 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:** Pesticide concentrations shall not exceed those allowable by applicable antidegradation policies (see State Water Resources Control Board Resolution No. 68-16 and 40 CFR section 131.12).

No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. Discharges shall not result in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses. Total identifiable persistent chlorinated hydrocarbon pesticides shall not be present in the water column at concentrations detectable within the accuracy of analytical methods approved by the Environmental Protection Agency or the executive Officer. Pesticide concentrations shall not exceed the lowest levels technically and economically achievable. Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of pesticides in excess of the Maximum Contaminant Levels set forth in California Code of Regulations, Title 22, Division 4, Chapter 15.

<i>Evaluation Guideline:</i>	CDFG Hazard Assessment Criteria - 14 ng/L 4-day average and 25 ng/L 1-hour average.
<i>Data Used to Assess Water Quality:</i>	The single chlorpyrifos detection of 0.046 µg/L at Salt Slough exceeded both the CDFG chronic and CDFG acute WQC of 0.014 and 0.02 µg/L. Chlorpyrifos was also found at trace concentrations in two additional samples (Starner et al., 2003).
<i>Spatial Representation:</i>	Samples for Salt Slough were taken at Highway 165; there were 14 separate sampling events.
<i>Temporal Representation:</i>	Sampling began on July 2, 2002, and continued throughout the summer until September 30, 2002. Each site was sampled once per week.
<i>Environmental Conditions:</i>	At each sampling event, temperature, dissolved oxygen (DO), pH, and electrical conductivity (EC) were measured in situ at each sampling site. DO, EC and temperature were measured. The pH at Salt Slough ranged from 6.49 to 7.66. Measured water temperature ranged from 18.9 to 26.9 °C. DO and EC had ranges of 5.14 to 7.37 mg/L and 877 to 1188 µS/cm, respectively.
<i>Data Quality Assessment:</i>	Quality Control (QC) for the chemical analysis portion of this study was conducted in accordance with Standard Operating Procedure QAQC001.00 (Segawa, 1995).

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<i>Line of Evidence</i>	-N/A
<i>Beneficial Use</i>	WA - Warm Freshwater Habitat
<i>Information Used to Assess Water Quality:</i>	The total size and size affected were reassessed by SWRCB staff and RWQCB staff, subsequent to the RWQCB's first change recommendation. This water body has been remapped and the revised extent impacted is 17 miles. The new extent is calculated by the Geospatial Water Body System (GeoWBS), using staff's best estimate of the extent to which water quality standards are not met.

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## Region 5

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**Water Segment:** Salt Slough (upstream from confluence with San Joaquin River)

**Pollutant:** Diazinon

**Decision:** Do Not 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. A second line of evidence represented mapping changes requested by the Regional Board and accepted by the SWRCB. None of the samples exceed the water quality objective but trace concentrations were present in two samples. The number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 14 samples exceeded the pesticide water quality objective. At least 28 samples are needed before a pollutant can be considered for removal from the list using the frequencies presented in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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**Numeric Line of Evidence** Pollutant-Water

**Beneficial Use:** AG - Agricultural Supply, 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:** Pesticide concentrations shall not exceed those allowable by applicable antidegradation policies (see State Water Resources Control Board Resolution No. 68-16 and 40 CFR section 131.12).

No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. Discharges shall not result in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses. Total identifiable persistent chlorinated hydrocarbon pesticides shall not be present in the water column at concentrations detectable within the accuracy of analytical methods approved by the Environmental Protection Agency or the executive Officer. Pesticide concentrations shall not exceed the lowest levels technically and economically achievable. Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of pesticides in excess of the Maximum Contaminant Levels set forth in California Code of Regulations, Title 22, Division 4, Chapter 15.

<i>Evaluation Guideline:</i>	CDFG Hazard Assessment Criteria - 0.10 ug/L 4-day average and 0.16 ug/L 1-hour average (Siepmann & Finlayson).
<i>Data Used to Assess Water Quality:</i>	Diazinon was not detected above the WQO at Salt Slough, but was present at trace concentrations in two samples (Starner et al., 2003).
<i>Spatial Representation:</i>	Samples for Salt Slough were taken at Highway 165; there were 14 separate sampling events.
<i>Temporal Representation:</i>	Sampling began on July 2, 2002, and continued throughout the summer until September 30, 2002. Each site was sampled once per week.
<i>Environmental Conditions:</i>	At each sampling event, temperature, dissolved oxygen (DO), pH, and electrical conductivity (EC) were measured in situ at each sampling site. DO, EC and temperature were measured. The pH at Salt Slough ranged from 6.49 to 7.66. Measured water temperature ranged from 18.9 to 26.9 °C. DO and EC had ranges of 5.14 to 7.37 mg/L and 877 to 1188 µS/cm, respectively.
<i>Data Quality Assessment:</i>	Quality Control (QC) for the chemical analysis portion of this study was conducted in accordance with Standard Operating Procedure QAQC001.00 (Segawa, 1995).

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<i>Line of Evidence</i>	-N/A
<i>Beneficial Use</i>	WA - Warm Freshwater Habitat
<i>Information Used to Assess Water Quality:</i>	The total size and size affected were reassessed by SWRCB staff and RWQCB staff, subsequent to the RWQCB's first change recommendation. This water body has been remapped and the revised extent impacted is 17 miles. The new extent is calculated by the Geospatial Water Body System (GeoWBS), using staff's best estimate of the extent to which water quality standards are not met.

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## Region 5

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**Water Segment:** San Joaquin River (Stanislaus River to Delta Boundary)

**Pollutant:** DDT

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from the section 303(d) list under section 4.5 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 insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 3 samples exceeded the OEHHA Screening Value and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy and there are not enough samples to support delisting.
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 no be removed from the section 303(d) list because applicable water quality standards are exceeded.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Central Valley 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.
<i>Evaluation Guideline:</i>	100 ng/g - OEHHA Screening Value (Brodberg & Pollock, 1999).
<i>Data Used to Assess Water Quality:</i>	Two out of 3 samples exceeded. A total of 3 filet composite samples of 2 largemouth bass and one of white catfish were collected. Largemouth bass were collected in 1998 and 2000. White catfish were collected in 1998. The guideline was exceeded in the 2000 sample of largemouth bass and the 1998 white catfish sample (TSMP, 2002).
<i>Spatial Representation:</i>	One station along the San Joaquin River about 4 miles upstream from South County Park near San Joaquin City (Vernalis) was sampled.

*Temporal Representation:*

Samples were collected annually 1998 and 2000.

*Data Quality Assessment:*

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

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## Region 5

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<b>Water Segment:</b>	San Joaquin River (Stanislaus River to Delta Boundary)
<b>Pollutant:</b>	Toxaphene
<b>Decision:</b>	Do Not Delist
<b>Weight of Evidence:</b>	<p>This pollutant is being considered for removal from the section 303(d) list under section 4.5 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category. Toxaphene is one chemical in the Group A pesticides.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li><li>2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li><li>3. Three of the 3 samples exceeded the OEHHA Screening Value and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy and not enough samples are available to assess the data with the confidence and power required by the Listing Policy.</li><li>4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.</li></ol>
<b>SWRCB Staff Recommendation:</b>	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards are exceeded.

### Lines of Evidence:

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Tissue
<b><i>Beneficial Use:</i></b>	CM - Commercial and Sport Fishing (CA)
<b><i>Matrix:</i></b>	Tissue
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	Central Valley 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.
<b><i>Evaluation Guideline:</i></b>	30 ng/g - OEHHA Screening Value (Brodberg & Pollock, 1999).
<b><i>Data Used to Assess Water Quality:</i></b>	Three out of 3 samples exceeded. A total of 3 filet composite samples were collected: 2 largemouth bass and one sample of white catfish. Largemouth bass were collected in 1998 and 2000. White catfish were collected in 1998. The guidance was exceeded in all three samples (TSMP, 2002).
<b><i>Spatial Representation:</i></b>	One stations along the San Joaquin River about 4 miles upstream from South County Park near San Joaquin City (Vernalis) was sampled.

*Temporal Representation:*

Samples were collected annually 1998 and 2000.

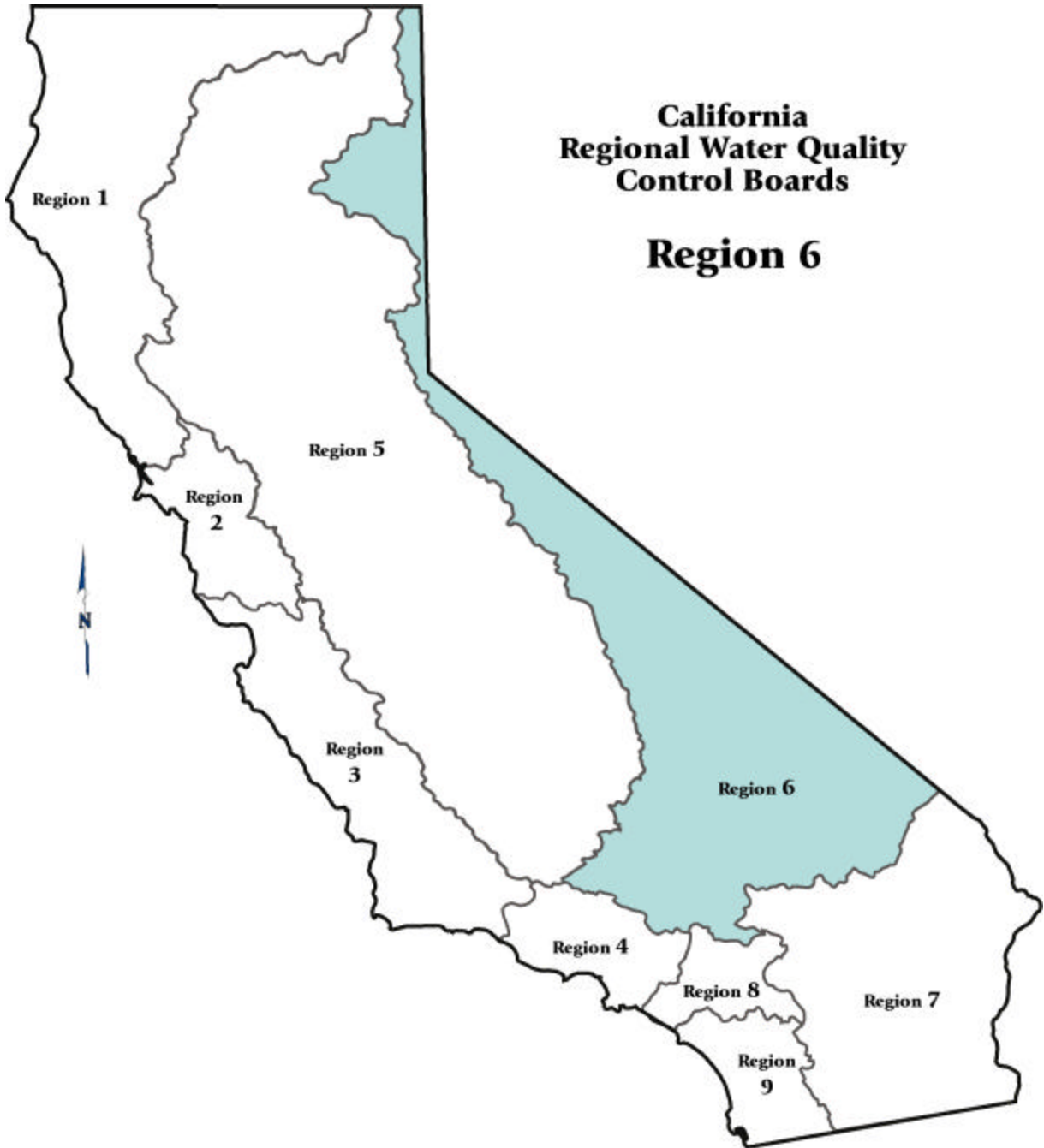
*Data Quality Assessment:*

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

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Fact Sheets Supporting  
“Do Not Delist” Recommendations



September 2005



## Region 6

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**Water Segment:** Bodie Creek

**Pollutant:** Mercury

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from 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 insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 2 samples exceeded the OEHHA Screening Value but the number of samples is insufficient to determine with the confidence and power required by 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Sediment
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Lahontan 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.
<i>Evaluation Guideline:</i>	0.3 ug/g (OEHHA Screening Value) (Brodberg & Pollock, 1999).
<i>Data Used to Assess Water Quality:</i>	Two out of 2 samples exceeded. Two filet composite samples of Lahontan cutthroat trout were collected. Trout were collected in 1992 and 2002. Both samples exceeded the guideline (TSMP, 2002).
<i>Spatial Representation:</i>	One station located 1/4 mile upstream of road crossing at Flying M hunting club.
<i>Temporal Representation:</i>	Samples were collected in 1992 and 2002.

*Data Quality Assessment:*

Toxic Substances Monitoring Program 1992-93 Data Report.  
Environmental Chemistry Quality Assurance and Data Report for the Toxic  
Substances Monitoring Program, 2001-2002. Department of Fish and Game.

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## Region 6

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**Water Segment:** Donner Lake

**Pollutant:** Polychlorinated biphenyls

**Decision:** Do Not Delist

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 2 samples exceeded the water quality objectives but the number of samples is insufficient to determine with the confidence and power required by 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Basin Plan: There shall be no detectable increase in bioaccumulation of pesticides in aquatic life.
<i>Evaluation Guideline:</i>	20 ng/g (OEHHA Screening Value) (Brodberg & Pollock, 1999).
<i>Data Used to Assess Water Quality:</i>	Two out of 2 samples exceeded. Two filet composite samples of lake trout were collected. Lake trout were collected in 1993 and 1996. The guideline was exceeded in both samples (TSMP, 2002).
<i>Spatial Representation:</i>	One station located about 1 mile west of the dam.
<i>Temporal Representation:</i>	Samples were collected 9/16/93 and 9/18/96.
<i>Data Quality Assessment:</i>	Toxic Substances Monitoring Program 1992-93 Data Report. Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish and Game

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## Region 6

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**Water Segment:** Mammoth Creek

**Pollutant:** Mercury

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for removal from 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 insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 3 samples exceeded the OEHHA Screening Value but the number of samples is insufficient to determine with the confidence and power required by 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CM - Commercial and Sport Fishing (CA)
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	Lahontan 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.
<i>Evaluation Guideline:</i>	0.3 ug/g (OEHHA Screening Value) (Brodberg & Pollock, 1999).
<i>Data Used to Assess Water Quality:</i>	Two out of 3 samples exceeded. Three filet composite samples of brown trout were collected in 1992, 1995, and 2002. The 1992 and 2002 samples exceeded the guideline (TSMP, 2002).
<i>Spatial Representation:</i>	Two stations were sampled: 1.3 miles downstream from Old Mammoth Road on Old State Road and between Hwy 395 and frontage road east of Hwy 395.
<i>Temporal Representation:</i>	Samples were collected annually in 1992, 1995, and 2002.

*Data Quality Assessment:*

Toxic Substances Monitoring Program 1992-93 and 1994-95 Data Reports.  
Environmental Chemistry Quality Assurance and Data Report for the Toxic  
Substances Monitoring Program, 2001-2002. Department of Fish and Game.

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# Fact Sheets Supporting “Do Not Delist” Recommendations



September 2005



## Region 7

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**Water Segment:** Alamo River

**Pollutant:** Selenium

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for delisting under sections 4.6 and 4.9 of the Listing Policy. Under section 4.6 a single line of evidence is necessary to assess listing status while under section 4.5, a minimum of two lines of evidence are needed to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant.

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

This conclusion is based on the staff findings that:

1. The tissue guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. None of 7 water samples exceeded the CTR criterion. The detection limit for these water samples is too high which makes it difficult to evaluate this data in terms of the Listing Policy. One of 27 tissue samples exceeded the fish consumption standard, and these do not exceed the allowable frequency listed in Table 4.1 of the Listing Policy. However, the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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***Numeric Line of Evidence***

Pollutant-Tissue

***Beneficial Use:***

CM - Commercial and Sport Fishing (CA), FR - Freshwater Replenishment, SH - Shellfish Harvesting

***Matrix:***

Tissue

***Water Quality Objective/  
Water Quality Criterion:***

2 ug/g OEHHA Screening Value.

*Data Used to Assess Water Quality:* One of 27 samples for selenium in fish tissue taken between June 1978 and November 2000 exceeded the fish consumption standard (TSMP, 2002).

*Temporal Representation:* Samples were collected between June 1978 to November 2000.

*Data Quality Assessment:* Toxic Substance Monitoring Program QAPP.

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***Numeric Line of Evidence*** Pollutant-Water

*Beneficial Use:* CM - Commercial and Sport Fishing (CA), FR - Freshwater Replenishment, SH - Shellfish Harvesting

*Matrix:* Water

*Water Quality Objective/  
Water Quality Criterion:* CTR: freshwater acute maximum = 20 ppb and freshwater chronic maximum = 5 ppb.

*Data Used to Assess Water Quality:* Data were collected by the RWQCB on 6/21/2001 at 7 different stations on the Alamo River. All samples were non-detects, with a detection limit of 100 ppb (CRBRWQCB, 2004c).

*Spatial Representation:* Samples were collected the following Alamo River sampling stations: AR-B (at the International Boundary), AR-D10 (Lower Alamo River drainshed, at Drop Structure #10), AR-D8 (Central Drain drainshed, at Drop Structure #8), AR-D6A (Holtville Main Drain drainshed, at Drop Structure #6A), AR-D6 (Rose Drain drainshed, at Drop Structure #6), AR-D3 (Central Alamo River drainshed, at Drop Structure #3), and at AR-GRB.

*Temporal Representation:* All samples were collected on 6/21/2001.

*Data Quality Assessment:* Used RWQCB QA/QC in sample collection. Lab analysis was done by North Coast Labs.

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***Line of Evidence*** Remedial Program in Place

*Beneficial Use* CM - Commercial and Sport Fishing (CA), FR - Freshwater Replenishment, SH - Shellfish Harvesting

*Information Used to Assess Water Quality:* TMDL completed (SWRCB, 2003).

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## Region 7

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**Water Segment:** Imperial Valley Drains

**Pollutant:** Selenium

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. 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 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. Seven of 69 fish tissue samples exceeded the water quality objective for the fish consumption standard and this exceeds 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 not be removed from 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:**

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<i>Numeric Line of Evidence</i>	Pollutant-Tissue
<i>Beneficial Use:</i>	CO - Cold Freshwater Habitat
<i>Matrix:</i>	Tissue
<i>Water Quality Objective/ Water Quality Criterion:</i>	OEHHA screening value for selenium 2 ppm.
<i>Data Used to Assess Water Quality:</i>	Seven of 69 samples for selenium in fish tissue taken between October 1986 and November of 2000 exceeded the fish consumption standard (TSMP, 2002).
<i>Spatial Representation:</i>	unknown

*Temporal Representation:* Samples collected between October 1986 and November 2000.  
*Data Quality Assessment:* Toxic Substances Monitoring Program Database 1978-2000.

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## Region 7

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**Water Segment:** New River (Imperial)

**Pollutant:** Oxygen, Dissolved

**Decision:** Do Not Delist

**Weight of Evidence:** Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant toxicity. The benthic community is impacted.

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

This conclusion is based on the staff findings that:

1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Eighty three of 116 samples exceeded the water quality objective, and additionally, there were a total of 3264 measurements taken over 16 days. The objective was exceeded numerous times on 14 of those 16 collection days. A large number of samples exhibit toxicity, and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. The benthic community in this water body is impacted and this pollutant is associated with this impact.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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***Numeric Line of Evidence***

Pollutant-Water

***Beneficial Use:***

FR - Freshwater Replenishment, IN - Industrial Service 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:***

Colorado River RWQCB Basin Plan: The dissolved oxygen concentration for waters designated as warm freshwater habitat shall not be reduced below 5 mg/L.

***Data Used to Assess Water Quality:***

Samples were collected on 83 different days from January 1997 through March 2004. Measurements were taken monthly. There were 83 exceedances of these

83 measurements. Samples were collected from January to December of 1999. Eighteen days of samples were collected and of the 18 samples there were 5 exceedances. D.O. levels dropped below 5 mg/L (3.54-4.95 mg/L) in 5 samples collected in June, July, August, and September. Samples were also collected by IID in 1997 and 1998. There were 3 exceedances of these 15 measurements (SWRQCB, 2003).

<i>Spatial Representation:</i>	The 83 samples were collected from the New River at the International Boundary. Specific sample collection locations are unknown for the 18 and 15 sample sizes.
<i>Temporal Representation:</i>	The 83 samples collected each month from January 1997 to March 2004. There are no data for October, November, and December of 1999. The 18 samples were collected from 1/21/1999 through 12/14/1999. Samples were collected once a month, except during April through September when there were two samples collected each month. The 15 samples were collected monthly from 1/28/1997 through 3/17/1998.
<i>Environmental Conditions:</i>	For the 83 samples, other field measurements include flow, temperature, pH, and conductivity. Field observations were also recorded. For the 18 samples, all measurements were taken at a depth of 0.5 meters. Samples were taken twice a month during the warmer months of April through September.
<i>Data Quality Assessment:</i>	Data used in 2002 assessment. Also used IID SOPs.
<i>QA/QC Equivalent:</i>	QA/QC used by RWQCB staff.

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<i>Beneficial Use:</i>	FR - Freshwater Replenishment, IN - Industrial Service Supply, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife Habitat
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	Colorado River RWQCB Basin Plan: The dissolved oxygen concentration for waters designated as warm freshwater habitat shall not be reduced below 5 mg/L.
<i>Data Used to Assess Water Quality:</i>	Samples were collected by the RWQCB during July of 1999. There were a total of 3264 measurements over 16 days. The objective was exceeded numerous times on 14 of those collection days (SWRCB, 2003).
<i>Spatial Representation:</i>	Samples were collected on the New River at Mexicali.
<i>Temporal Representation:</i>	Measurements were taken multiple times (every few minutes) each day from 7/7/99 through 7/23/99 (No measurements were taken on 7/20/99.)
<i>Environmental Conditions:</i>	Other information collected includes water temperature, conductivity, and pH.
<i>QA/QC Equivalent:</i>	QA/QC used by RWQCB staff.

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## Region 7

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**Water Segment:** New River (Imperial)

**Pollutant:** Sediment

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category as it has not been demonstrated that standards have yet been attained.

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* WA - Warm Freshwater Habitat

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The New River Sedimentation/Siltation TMDL was approved by RWQCB on June 26, 2002 and subsequently approved by USEPA on March 31, 2003.

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## Region 7

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**Water Segment:** Salton Sea

**Pollutant:** Salinity

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. 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 against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

3. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
4. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eighty six of 89 samples exceeded the water quality objective and this exceeds 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 not be removed from 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:

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**Line of Evidence** Pollutant-Water

**Beneficial Use** AQ - Aquaculture, 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:** The water quality objective for Salton Sea is to reduce the present level of salinity, and stabilize it at 35,000 mg/l unless it can be demonstrated that a different level of salinity is optimal for the sustenance of the Sea's wild and aquatic life (California Department of Fish and Game is attempting to make this determination). However, the achievement of this water quality objective shall be accomplished without adversely affecting the primary purpose of the Sea which is to receive and store agricultural drainage, seepage, and storm waters. Also, because of economic considerations, 35,000 mg/l may not be realistically achievable. In such case, any reduction in salinity which still allows for survival of the sea's aquatic life shall be deemed an acceptable alternative or interim objective. Because of the difficulty and predicted costliness of achieving salinity

stabilization of Salton Sea, it is unreasonable for the Regional Board to assume responsibility for implementation of this objective. That responsibility must be shared jointly by all of the agencies which have direct influence on the Sea's fate. Additionally, there must be considerable public support for achieving this objective, without which it is unlikely necessary funding for Salton Sea salinity control will ever be realized.

*Data Used to Assess Water Quality:*

Samples were collected by IID at 5 locations around the Salton Sea twice annually from 1995 to 2003. A total of 89 measurements were taken and only 3 measurements were less than 35,000 mg/L and 86 exceeded. Two of those measurements were at the "between rivers" site. Salinity data from this site is generally excluded from the IID Salt Balance Report due to possible influence of fresh water from the New and Alamo Rivers (CRBRWQCB, 2004).

*Spatial Representation:*

Samples were collected at 5 locations around the outer edge of the Salton Sea: Bertram Station, Desert Beach, Salton Sea Beach, Sandy Beach, and Between Rivers.

*Temporal Representation:*

Samples were collected twice annually (spring and fall) from 5/10/1995 through 10/23/2003.

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Fact Sheets Supporting  
“Do Not Delist” Recommendations



September 2005



## Region 8

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**Water Segment:** San Diego Creek Reach 1

**Pollutant:** Chlorpyrifos

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.

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

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

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* WA - Warm Freshwater Habitat

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Newport Bay Watershed Diazinon/Chlorpyrifos TMDL was approved by RWQCB on April 4, 2003 and subsequently approved by USEPA on February 13, 2004.

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## Region 8

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**Water Segment:** San Diego Creek Reach 1

**Pollutant:** Diazinon

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.

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

**SWRCB Staff Recommendation:** After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved and data demonstrates that the water quality objective is not exceeded.

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

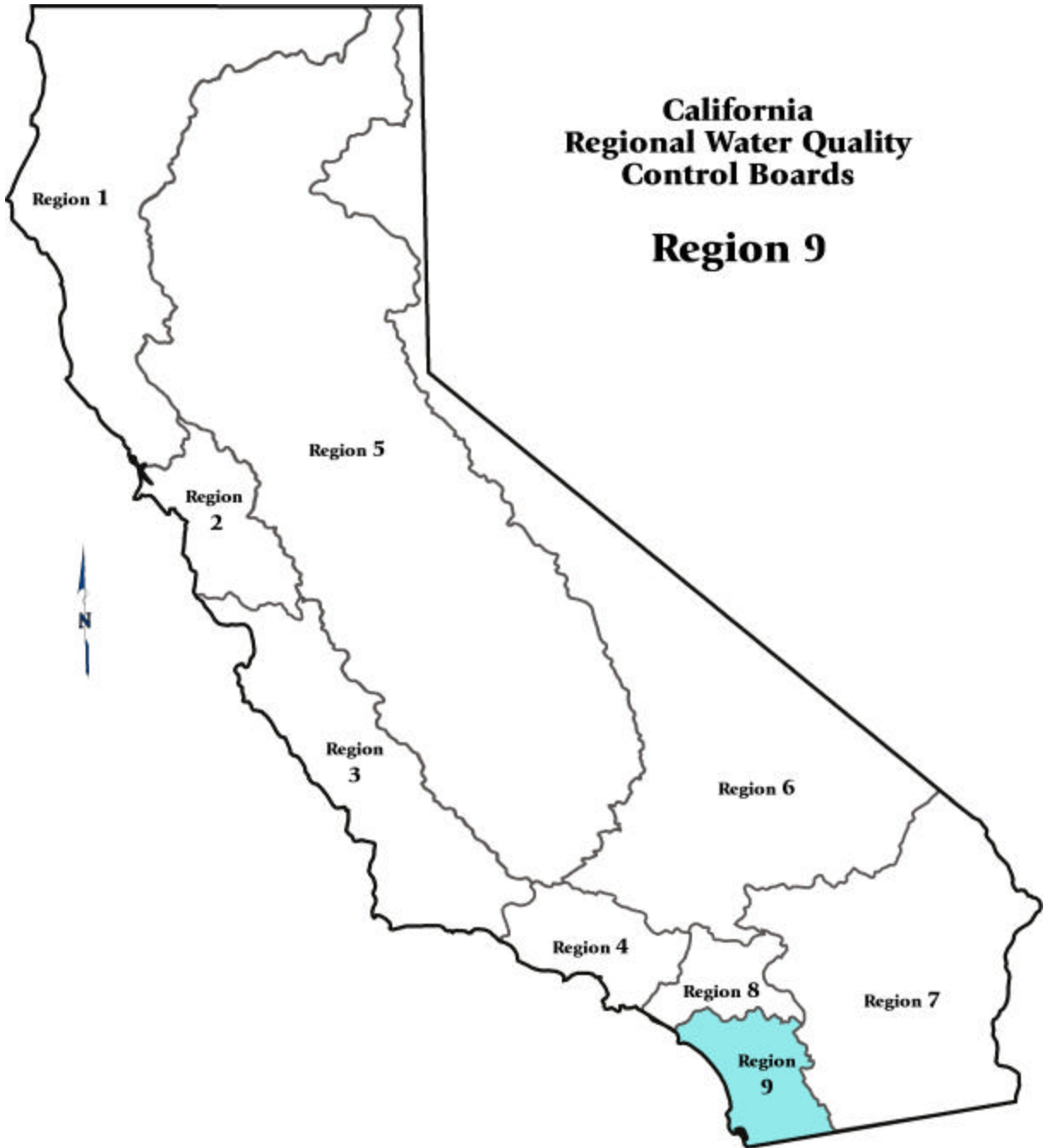
*Beneficial Use* WA - Warm Freshwater Habitat

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Newport Bay Watershed Diazinon/Chlorpyrifos TMDL was approved by RWQCB on April 4, 2003 and subsequently approved by USEPA on February 13, 2004.

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Fact Sheets Supporting  
“Do Not Delist” Recommendations



September 2005



## Region 9

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**Water Segment:** Agua Hedionda Creek

**Pollutant:** Total Dissolved Solids

**Decision:** Do Not Delist

**Weight of Evidence:** One line of evidence is available in the administrative record to assess this pollutant. A single sample was collected and it did exceed the Basin Plan criteria, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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***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 Quality:***

Data were collected by the RWQCB in 1998. One sample was collected. It was in exceedance (SWRCB, 2003).

***Spatial Representation:***

Sample was collected at Agua Hedionda Creek at Sycamore Avenue.

***Temporal Representation:***

Sample was collected on 06/10/1998.

***QA/QC Equivalent:***

Data used in 2002 assessment.

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## Region 9

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**Water Segment:** Chollas Creek

**Pollutant:** Diazinon

**Decision:** Do Not Delist

**Weight of Evidence:** One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.

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

**SWRCB Staff Recommendation:** After review of the available data and information for this recommendation, SWRCB staff conclude that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. Instead, the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

### Lines of Evidence:

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*Line of Evidence* Remedial Program in Place

*Beneficial Use* WA - Warm Freshwater Habitat

*Information Used to Assess Water Quality:* A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Chollas Creek Diazinon TMDL was approved by RWQCB on August 14, 2002 and subsequently approved by USEPA on November 3, 2003.

*Non-Numeric Objective:* Diazinon is causing toxicity in Chollas Creek and causing the creek to exceed narrative water quality objectives. The creek was added to the 1996 section 303(d) list for toxicity. Chollas Creek is on the 2002 section 303(d) list for diazinon.

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## Region 9

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**Water Segment:** Felicita Creek

**Pollutant:** Total Dissolved Solids

**Decision:** Do Not Delist

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 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-three of 24 samples exceeded the Basin Plan's water quality objective and this exceeds 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 not be removed from 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:

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	MU - Municipal & Domestic
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	From the Basin Plan: For inland surface waters with 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.
<i>Data Used to Assess Water Quality:</i>	Data were collected by the City of San Diego Water Dept. from 04/1999 to 06/1999. Three of 3 samples were in exceedance (SWRCB, 2003).
<i>Spatial Representation:</i>	Samples were collected at Felicita Creek site FEL2, off Quiet Hills Farm Road.
<i>Temporal Representation:</i>	Samples were collected once per month in April, May and June of 1999.
<i>QA/QC Equivalent:</i>	Data used in 2002 assessment. QA=

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	MU - Municipal & Domestic
<i>Matrix:</i>	Water
<i>Water Quality Objective/</i>	From the Basin Plan: For inland surface waters with all beneficial uses, the

*Water Quality Criterion:* 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. from 04/1999 to 04/2000. Twenty of 21 samples were in exceedance (SWRCB, 2003).

*Spatial Representation:* Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.

*Temporal Representation:* Samples were collected from 04/26/1999 to 04/18/2000. One sample per month was collected in 1999 from April to June, and 2-3 samples per month were collected in 2000 from February to April.

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## Region 9

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**Water Segment:** Forester Creek

**Pollutant:** Total Dissolved Solids

**Decision:** Do Not Delist

**Weight of Evidence:** One line of evidence is available in the administrative record to assess this pollutant. Ten of the 10 samples exceed the Basin Plan criteria. Even though the number of samples is insufficient to determine with the confidence and power of the Listing Policy, a minimum of 61 samples would be needed before 10 exceedances would result in a delisting of this pollutant for this water body.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing 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 not be removed from the section 303(d) list because applicable water quality standards are not attained.

### Lines of Evidence:

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*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 with all beneficial uses, the WQO for TDS is 500. 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 El Cajon in 09/1997 and monthly from 04/2000-12/2000. Only monthly averages were reported. 10 of 10 averages were in exceedance (SWRCB, 2003).

*Spatial Representation:* 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 often samples were collected during each month.

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## Region 9

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**Water Segment:** Forester Creek

**Pollutant:** pH (high)

**Decision:** Do Not Delist

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 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-eight of 48 samples exceeded the Basin Plan's water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	IN - Industrial Service Supply
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
<i>Data Used to Assess Water Quality:</i>	Data were collected by the City of El Cajon from 09/19994 to 01/2001. Fourteen of 14 samples were in exceedance (SWRCB, 2003).
<i>Spatial Representation:</i>	Samples were collected in Forester Creek, North of I-8 between Magnolia and Johnson.
<i>Temporal Representation:</i>	Oldest data used is almost 10 years old at time of assessment. Samples were collected from 09/27/1994 to 01/03/2001. Two samples each were collected in 09/1994, 05/1996, 11/1997, 01/1999, 06/1999, and 01/2001. One sample each was collected in 12/1999, and 07/2000.



*QA/QC Equivalent:* Data used in 2002 assessment.

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***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 and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).  
*Data Used to Assess Water Quality:* Data were collected by the City of El Cajon from 09/1994 to 01/2001. Twelve of 12 samples were in exceedance (SWRCB, 2003).  
*Spatial Representation:* Samples were collected at Forester Creek North of Vernon Way between Johnson and Marshall.  
*Temporal Representation:* Oldest data used is just under 10 years old at time of assessment. Samples were collected from 09/27/1994 to 01/03/2001. Two samples were collected per month in 09/1994, 05/1996, 11/1997, 01/1999, and 01/2001. One sample was collected per month in 06/1999 and 07/2000.  
*QA/QC Equivalent:* Data used in 2002 assessment.

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***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 and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).  
*Data Used to Assess Water Quality:* Data were collected by the City of El Cajon from 09/1994 to 01/2001. Twelve of 12 samples were in exceedance (SWRCB, 2003).  
*Spatial Representation:* Samples were collected at Forester Creek Channel at North City Limit.  
*Temporal Representation:* Age of oldest data assessed is almost 10 years at time of assessment. Samples were collected from 09/27/1994 to 01/03/2001. Two samples per month were collected in 09/1994, 05/1996, 11/1997, 01/1999, and 01/2001. One sample per month was also collected in 06/1999 and 07/2000.  
*QA/QC Equivalent:* Data used in 2002 assessment.

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***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 and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).  
*Data Used to Assess Water Quality:* Data were collected by the City of El Cajon in 09/1997 and 04/2000-12/2000. Only monthly averages were reported. None of the 10 averages were in exceedance (SWRCB, 2003).  
*Spatial Representation:* Samples were collected at Forester Creek. Location of sampling is unknown.

*Temporal Representation:* Samples were collected in 09/1997 and 04/2000-12/2000. Monthly averages are reported. It is unknown how many samples were collected per month.

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***Line of Evidence***

Ancillary Evidence Spills

***Beneficial Use***

IN - Industrial Service Supply

***Information Used to Assess Water Quality:***

County of San Diego DEH referral says that an emergency response team was on the scene to conduct a cleanup of the spill.

***Non-Numeric Objective:***

The pH value shall not be changed at any time more than 0.2 pH units from that which occurs naturally. Changes in normal ambient pH levels shall not exceed 0.2 units in waters with designated marine (MAR), or estuarine (EST), or saline (SAL) beneficial uses. Changes in normal ambient pH levels shall not exceed 0.5 units in fresh waters with designated cold freshwater habitat (COLD) or warm freshwater habitat (WARM) beneficial uses. In bays and estuaries the pH shall not be depressed below 7.0 nor raised above 9.0. In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.

***Evaluation Guideline:***

The corresponding numeric objective for pH from the Basin Plan for inland surface waters with all beneficial uses is 6.5 (minimum) to 8.5 (maximum).

***Data Used to Assess Water Quality:***

A County of San Diego Department of Environmental Health referral form indicates that 10-20 gallons of an acid/water/copper mixture (pH of 2-3) spilled into Forester Creek on 05/01/2001. The spill was reported to the County of San Diego DEH by Randy Olms ( employee at Chem-tronics). The complaint was referred to the City of El Cajon. It is reported that an emergency response team was on scene to conduct the clean up.

***Spatial Representation:***

The spill occurred from 1150 W. Bradley Av., El Cajon, CA 92020 (Chem-tronics, Inc.).

***Temporal Representation:***

The spill occurred on 05/01/2001.

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***Line of Evidence***

Ancillary Evidence Spills

***Beneficial Use***

IN - Industrial Service Supply

***Information Used to Assess Water Quality:***

The letter from Richard Odiorne (City of El Cajon) asks that Chem-tronics, inc. ensure that they have Best Management Practices in place for spill preventions and cleanup.

***Non-Numeric Objective:***

From the Basin Plan: The pH value shall not be changed at any time more than 0.2 pH units from that which occurs naturally. Changes in normal ambient pH levels shall not exceed 0.2 units in waters with designated marine (MAR), or estuarine (EST), or saline (SAL) beneficial uses. Changes in normal ambient pH levels shall not exceed 0.5 units in fresh waters with designated cold freshwater habitat (COLD) or warm freshwater habitat (WARM) beneficial uses. In bays and estuaries the pH shall not be depressed below 7.0 nor raised above 9.0. In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.

***Evaluation Guideline:***

The corresponding numeric objective for pH from the Basin Plan for inland surface waters with all beneficial uses is 6.5 (minimum) to 8.5 (maximum).

***Data Used to Assess Water Quality:***

A letter from the City of El Cajon, by Richard C. Odiorne, City Engineer, was written to Julian Medina at Chem-tronics, Inc, in El Cajon, CA. The letter is

dated July 6, 2000 and documents a 1000 gallons sodium hydroxide spill from Chem-tronic, Inc, that occurred on July 5, 2000.

*Spatial Representation:*

A sodium hydroxide spill occurred in the Forester Creek Channel from Chem-tronics, Inc. 1150 West Bradley Av., El Cajon, CA 92020.

*Temporal Representation:*

The spill occurred on July 5, 2000.

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## Region 9

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**Water Segment:** Green Valley Creek

**Pollutant:** Sulfates

**Decision:** Do Not Delist

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-two of 36 samples exceeded the Basin Plan's water quality objective and this exceeds 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 not be removed from 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:

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	MU - Municipal & Domestic
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	From the Basin Plan: For inland surface waters with a municipal 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.
<i>Data Used to Assess Water Quality:</i>	Data were collected by the City of San Diego Water Dept. from 04/1999 to 07/2001. Fourteen of 23 samples were in exceedance (SWRCB, 2003).
<i>Spatial Representation:</i>	Samples were collected in Green Valley Creek west of West Bernardo Drive.
<i>Temporal Representation:</i>	Samples were collected from 04/1999 to 07/2001. Three to 10 samples were collected per year, with multiple samples being collected on different days during the sampling months.
<i>QA/QC Equivalent:</i>	Data used in 2002 assessment.

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	MU - Municipal & Domestic

<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for sulfate is 250 mg/L. This is the concentration not to be exceeded more than 10% of the time during any one year period.
<i>Data Used to Assess Water Quality:</i>	Data were collected by the City of San Diego Water Dept. from 04/1999 to 04/2000. Eight of 13 samples were in exceedance.
<i>Spatial Representation:</i>	Samples were collected at Green Valley Creek west of West Bernardo Drive.
<i>Temporal Representation:</i>	Samples were collected from 04/26/1999 to 04/18/2000. Three samples were collected in 1999 ( 1 each in April, May, June) and 10 samples were collected in 2000, with multiple samples being collected each month in February, March, and April.
<i>QA/QC Equivalent:</i>	Data used in 2002 assessment.

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## Region 9

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**Water Segment:** Hodges, Lake

**Pollutant:** Color

**Decision:** Do Not Delist

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

This conclusion is based on the staff findings that:

1. Twenty out of 20 samples exceeded the Basin Plan objective. Even though more data is needed to determine if the water quality objective is exceeded with the confidence and power required by the Listing Policy, a minimum of 122 samples would be needed before 20 exceedances would result in a delisting.
2. 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 not be removed from the section 303(d) list because applicable water quality standards are not attained.

### Lines of Evidence:

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<i>Numeric Line of Evidence</i>	Pollutant-Water
<i>Beneficial Use:</i>	MU - Municipal & Domestic
<i>Matrix:</i>	Water
<i>Water Quality Objective/ Water Quality Criterion:</i>	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for color is 15 units.
<i>Data Used to Assess Water Quality:</i>	Data was collected at site HGA-0 by the City of San Diego Water Dept. from March 1996 to December 2000. Twenty of 20 samples were in exceedance.
<i>Spatial Representation:</i>	Samples were collected at site HGA-0.
<i>Temporal Representation:</i>	Samples were collected quarterly from March 1996 to December 2000.
<i>QA/QC Equivalent:</i>	Data used in 2002 assessment.

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## Region 9

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**Water Segment:** Hodges, Lake

**Pollutant:** Nitrogen

**Decision:** Do Not Delist

**Weight of Evidence:** Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list 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 three of the 98 samples from two combined lines of evidence exceeded the Basin Plan Criteria, but the total number of samples taken is insufficient to determine with the confidence and power required by the Listing Policy whether water quality standards are being attained.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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**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/  
Water Quality Criterion:** From the Basin Plan: For inland surface waters, enclosed bays and estuaries, coastal lagoons, and ground waters with 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. For this assessment, the N:P ratio was used.

**Data Used to Assess Water Quality:** Data was collected by the City of San Diego Water Dept. from March 1997 to July 2001. Seventeen of the 17 samples exceeded the N:P ratio of 10:1. In addition, the phosphorus samples were all in exceedance.

*Spatial Representation:* Samples were collected at Hodges Reservoir at HG Rec Area Delivery Point.  
*Temporal Representation:* Samples were collected on a quarterly basis from March 1997 to July 2001.  
*QA/QC Equivalent:* Data used in 2002 assessment.

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***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/  
Water Quality Criterion:*

From the Basin Plan: For inland surface waters, enclosed bays and estuaries, coastal lagoons, and ground waters with 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. For this assessment, the N:P ratio was used.

*Data Used to Assess Water  
Quality:*

Data was collected at site HGA at several depths by the City of San Diego Water Dept. from January 1997 to July 2001. Eight of the 81 samples were in exceedance (SWRCB, 2003).

*Spatial Representation:*

Samples were collected at Hodges Reservoir site HGA at depths of 0m, 3m, 12m, and 1ft above the bottom.

*Temporal Representation:*

Samples were collected on a quarterly basis from January 1997 to July 2001.

*QA/QC Equivalent:*

Data used in 2002 assessment. QA=

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## Region 9

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**Water Segment:** Hodges, Lake

**Pollutant:** Phosphorus

**Decision:** Do Not Delist

**Weight of Evidence:** Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list 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. Sixty of the 97 samples from two combined lines of evidence exceeded the Basin Plan Criteria, and these 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 not be removed from 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:

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*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/  
Water Quality Criterion:* From the Basin Plan: For inland surface waters - any standing body of water, and all beneficial uses, the WQO for total phosphorus is 0.025 mg/L. This is the maximum, threshold - 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 was collected by the City of San Diego Water Dept. from March 1997 to July 2001. Sixteen of the 17 samples were in exceedance (SWRCB, 2003).

*Spatial Representation:* Samples were collected at Hodges Reservoir at the HG Rec Area Delivery Point.

*Temporal Representation:* Samples were collected on a quarterly basis from March 1997 to July 2001.

*QA/QC Equivalent:* Data used in 2002 assessment.

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***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/  
Water Quality Criterion:* From the Basin Plan: For inland surface waters - any standing body of water, and all beneficial uses, the WQO for total phosphorus is 0.025 mg/L. This is the maximum, threshold - 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 was collected at site HGA at several depths by the City of San Diego Water Dept. from January 1997 to July 2001. Forty four of the 80 samples were in exceedance (SWRCB, 2003).

*Spatial Representation:* Samples were collected at Hodges Reservoir at HG Station A at depths of 0m, 3m, 12m, and 1ft. from the bottom.

*Temporal Representation:* Samples were collected on a quarterly basis from January 1997 to July 2001.

*QA/QC Equivalent:* Data used in 2002 assessment.

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## Region 9

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**Water Segment:** Hodges, Lake

**Pollutant:** Total Dissolved Solids

**Decision:** Do Not Delist

**Weight of Evidence:** One line of evidence is available in the administrative record to assess this pollutant. 10 of the 10 samples exceed the Basin Plan criteria, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

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

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### Lines of Evidence:

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<b><i>Beneficial Use:</i></b>	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
<b><i>Matrix:</i></b>	Water
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	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.
<b><i>Data Used to Assess Water Quality:</i></b>	Data was collected at site HGA-0 by the City of San Diego Water Dept. from September 1998 to December 2000. Ten of the 10 samples were in exceedance.
<b><i>Spatial Representation:</i></b>	Samples were collected at site HGA-0.
<b><i>Temporal Representation:</i></b>	Samples were collected from September 1998 to December 2000. Samples were collected quarterly in 1999 and 2000. Two samples were collected in 1998, 1 in September, and 1 in December.
<b><i>QA/QC Equivalent:</i></b>	Data used in 2002 assessment.

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## Region 9

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**Water Segment:** Kit Carson Creek

**Pollutant:** Total Dissolved Solids

**Decision:** Do Not Delist

**Weight of Evidence:** This pollutant is being considered for placement on 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. 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. Ten of 11 samples exceeded the 500 mg/L TDS for inland surface waters Basin Plan water quality objective and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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***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 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. from 1999-2000. Ten of the 11 samples were in exceedance (SWRCB, 2003).

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

*Temporal Representation:* Samples were collected in April-June 1999 and February-April 2000.  
*QA/QC Equivalent:* Data used in 2002 assessment.

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## Region 9

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**Water Segment:** Kitchen Creek

**Pollutant:** Turbidity

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. No samples exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient 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:

4. It cannot be determine if the data quality requirements of section 6.1.4 of the Policy are satisfied due to the absence of the information.
5. The data used does not satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of 1 sample exceeded the 5 NTU water quality objective. More data is needed to determine if the water quality objective is exceeded.
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 not be placed on the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.

**Lines of Evidence:**

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*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 ntu. For other beneficial uses, the WQO for turbidity is 20 ntu.

*Data Used to Assess Water Quality:*

Data were collected by the City of San Diego Water Dept. in 1997. None of 1 sample was in exceedance.

*Spatial Representation:*

Samples were collected at Kitchen Creek at site KTC5.

*Temporal Representation:*

One sample was collected on 05/19/1997.

*QA/QC Equivalent:*

Data used in 2002 assessment.

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## Region 9

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**Water Segment:** Kitchen Creek

**Pollutant:** pH

**Decision:** Do Not Delist

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

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

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against this water segment-pollutant 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 29 samples from two combined lines of evidence exceeded the 6 - 8.5 pH Basin Plan water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
3. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

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

### Lines of Evidence:

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***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/  
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 Used to Assess Water Quality:***

Data were collected by the City of San Diego Water Dept. in 1997. None of the 8 samples were in exceedance.

***Spatial Representation:***

Samples were collected at Kitchen Creek site KTC2.

***Temporal Representation:***

Samples were collected 3-5 times over a period of 6 minutes or less on



03/12/1997 and 06/18/1997.

*QA/QC Equivalent:* Data used in 2002 assessment.

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***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/  
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 Used to Assess Water  
Quality:*

Data were collected by the City of San Diego in 1997 and 1998. Five of the 21 samples were in exceedance. All 5 exceedances occurred on one day, 05/19/1997.

*Spatial Representation:*

Samples were collected at Kitchen Creek at site KTC5.

*Temporal Representation:*

Samples were collected on 01/01/1997, 04/01/1997, 05/19/1997, 06/18/1997, and 01/29/1998.

*QA/QC Equivalent:*

Data used in 2002 assessment.

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## Region 9

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**Water Segment:** Murrieta Creek

**Pollutant:** Phosphorus

**Decision:** Do Not Delist

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One-hundred and five of 167 samples exceeded the Basin Plan criteria and this exceeds 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 not be removed from 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:

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**Numeric Line of Evidence** Pollutant-Water

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

**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 LAW Crandall from 1997 to 1999. Five of 7 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 05/11/1999. One to 4 samples were collected per year. One sample was reported per sampling day.

*QA/QC Equivalent:* Data used in 2002 assessment.

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***Numeric Line of Evidence*** Pollutant-Water

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

*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 from 1999 to 2002. One-hundred of 160 samples were in exceedance (Rancho California Water District, 2002).

*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.

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## Region 9

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**Water Segment:** Pacific Ocean Shoreline, San Diego HU

**Pollutant:** Bacteria Indicators

**Decision:** Do Not 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. A sufficient number of samples exceed the bacteriological standards

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

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 75 out of 476 exceedances for enterococcus standards, 56 out of 493 exceedances for single-sample fecal coliform criteria and 96 out of 493 30-day average exceedances. For Total Coliform, there were 83 out of 532 exceedances. These overall 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 not be removed from 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:

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***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 1,501 analyses were performed from 1999 through 2003. Of these, there were 75 out of 476 exceedances for enterococcus standards, 56 out of 493 exceedances for single-sample fecal coliform criteria and 96 out of 493 30-day

average exceedances. For Total Coliform, there were 83 out of 532 exceedances. Exceedances occurred during both wet and dry seasons (City of San Diego, 2004).

*Spatial Representation:*

San Diego River Mouth (a.k.a. Dog Beach). This site is located on the south side of the mouth of the San Diego River. "Ten stations were monitored at the San Diego River mouth site during this time: one at the sampling site, eight as far as 2,000 ft. to the left, and one 100 ft to the right of the site."

*Temporal Representation:*

Data were available for this assessment from 01/1999 through 10/2003. Samples were collected during both the wet and dry seasons.

*Environmental Conditions:*

There were several sewage spills from 1999 through 2003 that impacted the site. However, there were not enough elevated bacterial levels associated with the spills to reduce the total number of exceedances below the allowable threshold.

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.

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## Region 9

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**Water Segment:** Prima Deshecha Creek

**Pollutant:** Phosphorus

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. 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 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. Forty-six of 54 samples were in exceedance of the Basin Plan water quality objective and this exceeds 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 not be removed from 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:**

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***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 Criterion:***

From the Basin Plan: For inland surface waters - streams and other flowing waters and 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.

<i>Data Used to Assess Water Quality:</i>	Data were collected by Orange County in 1997-2000. Forty-six of 54 samples were in exceedance (SWRCB, 2003).
<i>Spatial Representation:</i>	Samples were collected at Prima Deshecha Creek. Exact location was not reported.
<i>Temporal Representation:</i>	Samples were collected 1-5 times per month from 07/02/1997 to 06/29/2000. At least 4 months per year were represented.
<i>QA/QC Equivalent:</i>	Data used in 2002 assessment.

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## Region 9

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**Water Segment:** Prima Deshecha Creek

**Pollutant:** Turbidity

**Decision:** Do Not Delist

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

One line of evidence is available in the administrative record to assess this pollutant. 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 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. Forty of 54 samples were in exceedance of the turbidity water quality objective and this exceeds 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 not be removed from 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:**

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***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 Criterion:*** From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for turbidity is 20 ntu. 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 Orange County from 1997-2000. Forty of 54 samples were in exceedance. Turbidity concentrations ranged from 4.0 to 5400. There



was no note of weather events to correspond with changing turbidity levels (SWRCB, 2003).

*Spatial Representation:*

Samples were collected at Prima Deshecha Channel.

*Temporal Representation:*

Samples were collected 1-5 times per month from 07/02/1997 to 06/29/2000. Data was reported for at least four months of each year.

*QA/QC Equivalent:*

Data used in 2002 assessment.

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## Region 9

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**Water Segment:** Rainbow Creek

**Pollutant:** Nitrogen

**Decision:** Do Not Delist

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 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 46 samples exceeded the N:P Ratio, and these exceed the allowable frequency listed in Table 4.1 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 not be removed from 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:

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**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, 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 RWQCB9 in 2000. Eighteen of 25 N:P ratios were in exceedance. However, all phosphorus samples were in exceedance of the 0.1 mg/L standard, and if phosphorus levels meet the standard, all 25 nitrogen samples would be in exceedance. Nitrogen levels varied in the creek from 2.1 mg/L (in October) to 23 mg/L (in June).

**Spatial Representation:** Samples were collected at Rainbow Creek Station 4, Willow Glen.

**Temporal Representation:** Samples were collected 2-4 times per month from 01/2000 to 10/2000.

*QA/QC Equivalent:* Data used in 2002 assessment.

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***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, 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 RWQCB9 in 2000. Twenty-five of 25 samples, N:P ratios were in exceedance of the 10:1 ratio standard.

*Spatial Representation:* Samples were collected at Rainbow Creek station 5, Riverhouse.

*Temporal Representation:* Samples were collected 2-4 times per month from 01/2000 to 10/2000.

*QA/QC Equivalent:* Data used in 2002 assessment.

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***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, 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 RWQCB9 in 2000. One sample was collected and was in exceedance of the 10:1 N:P ratio.

*Spatial Representation:* Samples were collected at Rainbow Creek station 2, Hines Nurseries.

*Temporal Representation:* One sample was collected on 09/19/2000.

*QA/QC Equivalent:* Data used in 2002 assessment.

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***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, 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 RWQCB9 in 2002. For 4 of 9 samples, the N:P ratio exceeded 10:1. However, none of the phosphorus samples met standards, but if they had, all 9 of 9 nitrogen samples would have been considered to be in exceedance.

*Spatial Representation:*

Samples were collected at Rainbow Creek 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.

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***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, 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 RWQCB9 in 2000. Nine of 9 N:P ratios 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.

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***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, 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 RWQCB from 1997-2000. Six samples were collected, but only 2 samples were collected on the same days that phosphorus samples were collected. Only these two samples were used, because there is currently only the N:P ratio to evaluate nitrogen levels. None of 2 ratios were in exceedance.

*Spatial Representation:*

Samples were collected at Rainbow Creek near Fallbrook.

*Temporal Representation:*

Samples were collected 1-2 times per year from 12/1997 to 03/2000.

*QA/QC Equivalent:*

Data used in 2002 assessment.

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## Region 9

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**Water Segment:** Rainbow Creek

**Pollutant:** Phosphorus

**Decision:** Do Not Delist

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventy-six of 76 samples exceeded the Basin Plan criteria, and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy. Additionally, 28167 samples were collected to determine the N:P ratio. Of these samples, 4965 ratios were in exceedance of the 10:1 ratio.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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**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 - streams and other flowing waters 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.

**Data Used to Assess Water Quality:** Data were collected by RWQCB9 from 1997-1999. Seven of 7 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 02/1999.

**QA/QC Equivalent:** Data used in 2002 assessment.

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***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 - streams and other flowing waters, 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.

***Data Used to Assess Water Quality:*** Data were collected by RWQCB in 2000. Twenty-five of 25 samples were in exceedance (SWRCB, 2003).

***Spatial Representation:*** Data were collected in Rainbow Creek at Station 4, Willow Glen, near the Willow Glen Rd. Steel Bridge.

***Temporal Representation:*** Samples were collected 2-3 times per month from 01/2000 to 10/2000.

***QA/QC Equivalent:*** Data used in 2002 assessment.

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***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 - streams and other flowing waters, 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.

***Data Used to Assess Water Quality:*** Data were collected by RWQCB in 2000. Twenty-five of 25 samples were in exceedance (SWRCB, 2003).

***Spatial Representation:*** Samples were collected at Rainbow Creek at station 5, Riverhouse.

***Temporal Representation:*** Samples were collected 2-3 times per month form 01/2000 to 10/2000.

***QA/QC Equivalent:*** Data used in 2002 assessment.

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***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 - streams and other flowing waters, 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.

***Data Used to Assess Water*** Data were collected by the RWQCB in 2000. One sample was collected. It was

*Quality:* in exceedance (SWRCB, 2003).  
*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.

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***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 - streams and other flowing waters, 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.  
*Data Used to Assess Water Quality:* Data were collected by the RWQCB in 2000. Nine of 9 samples were in exceedance (SWRCB, 2003).  
*Spatial Representation:* Samples were collected at Rainbow Creek 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.

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***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 - streams and other flowing waters, 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.  
*Data Used to Assess Water Quality:* Data were collected by RWQCB in 2000. Nine of 9 samples were in exceedance (SWRCB, 2003).  
*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.

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***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, 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 RWQCB9 in 2000. Eighteen of 25 N:P ratios were in exceedance. However, all phosphorus samples were in exceedance of the 0.1 mg/L standard, and if phosphorus levels meet the standard, all 25 nitrogen samples would be in exceedance. Nitrogen levels varied in the creek from 2.1 mg/L (in October) to 23 mg/L (in June).

*Spatial Representation:* Samples were collected at Rainbow Creek Station 4, Willow Glen.

*Temporal Representation:* Samples were collected 2-4 times per month from 01/2000 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, 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 RWQCB9 in 2000. Twenty-five of 25 samples, N:P ratios were in exceedance of the 10:1 ratio standard.

*Spatial Representation:* Samples were collected at Rainbow Creek station 5, Riverhouse.

*Temporal Representation:* Samples were collected 2-4 times per month from 01/2000 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, 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.

<i>Data Used to Assess Water Quality:</i>	Data were collected by RWQCB9 in 2000. One sample was collected and was in exceedance of the 10:1 N:P ratio.
<i>Spatial Representation:</i>	Samples were collected at Rainbow Creek station 2, Hines Nurseries.
<i>Temporal Representation:</i>	One sample was collected on 09/19/2000.
<i>QA/QC Equivalent:</i>	Data used in 2002 assessment.

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***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, 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 RWQCB9 in 2002. For 4 of 9 samples, the N:P ratio exceeded 10:1. However, none of the phosphorus samples met standards, but if they had, all 9 of 9 nitrogen samples would have been considered to be in exceedance.

*Spatial Representation:*

Samples were collected at Rainbow Creek 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.

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***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, 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 RWQCB9 in 2000. Nine of 9 N:P ratios 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.

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***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, 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 RWQCB from 1997-2000. Six samples were collected, but only 2 samples were collected on the same days that phosphorus samples were collected. Only these two samples were used, because there is currently only the N:P ratio to evaluate nitrogen levels. None of 2 ratios were in exceedance.

*Spatial Representation:*

Samples were collected at Rainbow Creek near Fallbrook.

*Temporal Representation:*

Samples were collected 1-2 times per year from 12/1997 to 03/2000.

*QA/QC Equivalent:*

Data used in 2002 assessment.

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## Region 9

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**Water Segment:** San Diego Bay Shoreline, Shelter Island Shoreline Park

**Pollutant:** Bacteria Indicators

**Decision:** Do Not 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. A large number of samples exceed the AB 411 bacterial indicator standard.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 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 two of 47 samples exceeded the enterococcus standards, and 113 of 414 exceeded the fecal coliform standard in one of the lines of evidence. One hundred and ninety-nine of 1,178 samples exceeded the bacterial standards for all three indicators in the other line of evidence and these 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 not be removed from 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:

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***Numeric Line of Evidence***

Pollutant-Water

***Beneficial Use:***

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

***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 with a REC2 beneficial use, the WQO for Fecal Coliform is an average of 2,000 colonies/100mL for any 30-day period. No more than 10% of total samples during any 30-day period should exceed 4,000 colonies per 100 mL.

AB411 standards: for fecal coliform: 30-day avg is 200 colonies/100 mL, single sample standard is 400 colonies/100 mL. For total coliform: 30-day avg. is 1,000

colonies/100mL, single sample standard is 10,000 colonies/100 mL. If fecal/total ratio is greater than 0.1, the single sample maximum for total coliform is 1,000 colonies/100 mL. The AB411 standard for enterococcus for the 30-day avg is 35 colonies/100mL, single sample maximum is 104 colonies/100 mL.

<i>Data Used to Assess Water Quality:</i>	Data were collected by the City of San Diego from 1999 to 2003. AB411 standards: For enterococcus, 32 of 47 geomeans were in exceedance and 113 of 414 samples were in exceedance of the single sample standard (City of San Diego, 2004).
<i>Spatial Representation:</i>	Samples were collected in the San Diego Bay at Shelter Island. Samples were collected at three locations in relation to each other: "Left," "Right," and "Middle."
<i>Temporal Representation:</i>	Samples were collected from 05/25/1999 to 10/23/2003.
<i>Environmental Conditions:</i>	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.

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<b><i>Line of Evidence</i></b>	Pollutant-Water
<i>Beneficial Use</i>	R1 - Water Contact Recreation, R2 - Non-Contact Recreation
<i>Non-Numeric Objective:</i>	Objectives are numeric.
<i>Evaluation Guideline:</i>	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.
<i>Data Used to Assess Water Quality:</i>	A total of 1,178 analyses were performed from 1999 through 2003. Of these, there were 199 exceedances of the bacterial standards for all three indicators. Exceedances occurred during both wet and dry seasons.(City of San Diego, 2004).
<i>Spatial Representation:</i>	Shelter Island Shoreline Park. This site is located in San Diego Bay on the east side of Shelter Island. "Ten stations were monitored at the Shelter Island Shoreline Park site during this time: one at the sampling site, eight as far as 2,800 feet to the left, and one 300 feet to the right of the site."
<i>Temporal Representation:</i>	Data were available for the Shelter Island Shoreline Park assessment from 01/1999 through 10/2003. Samples were collected during both the wet and dry seasons.

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## Region 9

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**Water Segment:** San Diego Bay, Shelter Island Yacht Basin

**Pollutant:** Copper

**Decision:** Do Not Delist

**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. None of one sample exceed the water quality objective.

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

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the 3.1 ppb CTR chronic saltwater criteria, but the number of samples is insufficient to determine with the confidence 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 not be removed from the section 303(d) list because it cannot be determined if applicable water quality standards are attained.

### **Lines of Evidence:**

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#### ***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, 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/ Water Quality Criterion:***

From the CTR: The dissolved copper acute saltwater criterion is 4.8 ppb. The dissolved copper chronic criterion is 3.1 ppb. This criteria is more stringent or as stringent as the other criteria found.

#### ***Data Used to Assess Water Quality:***

Data were collected in 03/2004 by the RWQCB. One sample was collected and was not in exceedance of the acute or the chronic standards.

*Spatial Representation:*

Samples were collected at San Diego Bay, Shelter Island Yacht Basin, mid-channel off the entrance to the yacht basin (SDRWQCB, 2004c).

*Temporal Representation:*

Samples were collected on 03/20/2004 at 9:49am.

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## Region 9

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**Water Segment:** Sandia Creek

**Pollutant:** Total Dissolved Solids

**Decision:** Do Not Delist

**Weight of Evidence:** Two lines of evidence are available in the administrative record to assess this pollutant. Twelve of the 12 samples exceed the Basin Plan criteria. Although this is not enough samples to delist this water body for this pollutant, a minimum of 73 samples would be needed before 12 exceedances would result in a delisting.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination 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 not be removed from the section 303(d) list because applicable water quality standards are not attained.

### Lines of Evidence:

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<b><i>Beneficial Use:</i></b>	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
<b><i>Matrix:</i></b>	Water
<b><i>Water Quality Objective/ Water Quality Criterion:</i></b>	From the Basin Plan: For inland surface waters in HSA 902.22, and all 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.
<b><i>Data Used to Assess Water Quality:</i></b>	Data were collected by RWQCB9 in 1998. One sample was collected, it was in exceedance.
<b><i>Spatial Representation:</i></b>	Sample was collected at Sandia Creek at Sandia Creek Rd., 0.5-1.0 mile above the confluence.
<b><i>Temporal Representation:</i></b>	One sample was collected on 06/09/1998.
<b><i>QA/QC Equivalent:</i></b>	Data used in 2002 assessment.

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<b><i>Numeric Line of Evidence</i></b>	Pollutant-Water
<b><i>Beneficial Use:</i></b>	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. 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. Eleven of 11 samples were in exceedance.

*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.

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## Region 9

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**Water Segment:** Sutherland Reservoir

**Pollutant:** Color

**Decision:** Do Not Delist

**Weight of Evidence:** Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list 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-one of 21 samples exceeded the Basin Plan criteria.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from 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:

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*Numeric Line of Evidence* Pollutant-Water

*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. For other beneficial uses, the WQO is 20 units.

*Data Used to Assess Water Quality:* Data was collected at site SUA-0 by the City of San Diego Water Dept. between March 1996 and December 2000. Twenty-one of 21 samples were in exceedance of the WQO for municipal waters.

*Spatial Representation:* Samples were collected at site SUA-0 at 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.

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## Region 9

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**Water Segment:** Tijuana River Estuary

**Pollutant:** Oxygen, Dissolved

**Decision:** Do Not Delist

**Weight of Evidence:** Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list 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 18312 of 42308 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 met.

**SWRCB Staff Recommendation:** After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### Lines of Evidence:

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**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: 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 RWQCB9 in 1997 and 1998. Ninety-three of 93 samples were in below the minimum standard. All 8 reported averages for 1997 and 1998 were in exceedance.

**Spatial Representation:** Samples were collected at the Tijuana River Estuary. Exact sample location was not reported.

*Temporal Representation:* Samples were collected 5-31 times per month from 01/03/1998 to 05/31/1998. Samples were also collected in May, July and August 1997 and June-November, 1998, but only monthly averages were reported with the data set.

*QA/QC Equivalent:* Data used in 2002 assessment.

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***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: 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 Tijuana National Estuarine Research Reserve in 1998. Five of 12 averages were below the minimum standard.

*Spatial Representation:* Samples were collected at the Tijuana River Estuary. Exact sampling location was not reported.

*Temporal Representation:* Samples were collected from 01/1998 to 12/1998. Only monthly averages were reported.

*QA/QC Equivalent:* Data used in 2002 assessment.

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***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: 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 Tijuana River NERR in 1997-1998. There were 10212 of 20879 samples that were below the minimum standard.

*Spatial Representation:* Samples were collected at Tijuana River Estuary site TL.

*Temporal Representation:* Samples were collected every 30 minutes from 05/23/1997 to 12/27/1998. During each month, some data were missing, often only over the course of a day of two. Overall, that majority of days per month are represented. Sampling did not occur in 09/1997.

*QA/QC Equivalent:* Data used in 2002 assessment.

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***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: 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 Tijuana River NERR in 1999. There were 378 of 1375 samples that were in exceedance.

*Spatial Representation:*

Samples were collected at the Tijuana River Estuary site OS.

*Temporal Representation:*

Samples were collected every 30 minutes from 03/01/1999 to 03/29/1999.

*QA/QC Equivalent:*

Data used in 2002 assessment.

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***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: 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 Tijuana River NERR in 1997 and 1998. There were 7624 of 19949 samples that were below the minimum standard.

*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 01/01/1998 to 12/31/1998. Samples were collected from 04/1997 to 09/1997 and during every month in 1998, and at least 2-3 days per month are represented. Samples were not always collected daily.

*QA/QC Equivalent:*

Data used in 2002 assessment.

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***Line of Evidence***

Testimonial Evidence

<i>Beneficial Use</i>	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
<i>Non-Numeric Objective:</i>	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.
<i>Data Used to Assess Water Quality:</i>	From the letter from San Diego Baykeeper written on 06/14/2004: We recommend continued listing of this area for impairment by bacteria, low dissolved oxygen, eutrophication, pesticides, solids, synthetic organics, lead, nickel, thallium, and trash.
	Submittal was narrative. There is insufficient information given to determine which beneficial uses may or may not be supported.
<i>Spatial Representation:</i>	The reported area is the Tijuana River Estuary. Exact location was not given.
<i>Temporal Representation:</i>	The letter regarding impairment was written on 06/14/2004. A more specific time of impairment was not reported.

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