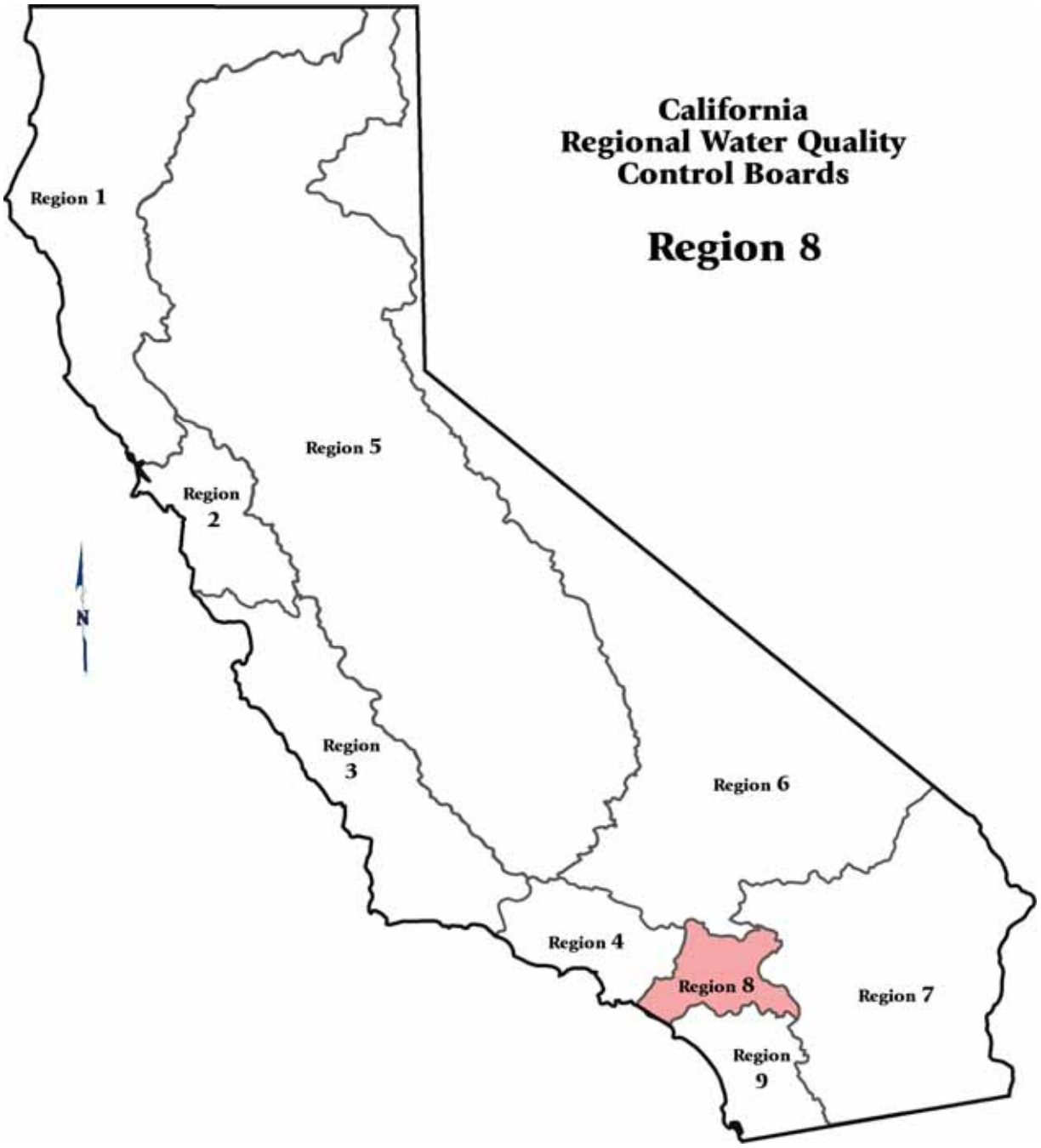
Fact Sheets Supporting
Revision of the Section 303(d) List



November 2006

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Santa Ana Region (8)

New or Revised Fact Sheets

New or Revised Fact Sheets

Santa Ana Region (8)

LIST

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

Region 8

Water Segment:	Anaheim Bay
Pollutant:	Sediment Toxicity
Decision:	List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6, waters may be placed on the 303(d) list for toxicity alone. One line of evidence is available in the administrative record to assess this pollutant. A large number of samples were toxic. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nineteen of 59 samples exceeded the criteria (90 percent of the minimum significant difference for test species Eohaustorius estuarius), and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Lines of Evidence:

Numeric Line of Evidence	Toxicity
Beneficial Use:	MA - Marine Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Basin Plan Narrative Water Quality Objective: The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.
Data Used to Assess Water Quality:	Nineteen of 59 samples exceeded the 90 percent of the minimum significant difference for test species Eohaustorius estuarius. Two of 29 samples exhibited toxicity in the dry season (8/25/01), and 17 of 30 exhibited toxicity in the wet season (4/14/03) (Santa Ana RWQCB,

	2003a).
Spatial Representation:	The data shows data collected at 33 stations (no data were included for stations 22 and 26.)
Temporal Representation:	Data were collected on 8/25/01 and 4/14/2003.
Environmental Conditions:	Samples were collected during dry (8/25/01) and wet (4/14/03) seasons.
Data Quality Assessment:	SARWQCB followed the Bight 1998 QAPP developed by SCCWRP.
QA/QC Equivalent:	Quality control data was presented.

Region 8

Water Segment:	Balboa Beach
Pollutant:	DDT
Decision:	List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 21 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Lines of Evidence:

Numeric Line of Evidence	Pollutant-Tissue
Beneficial Use:	CM - Commercial and Sport Fishing (CA)
Matrix:	Tissue
Water Quality Objective/ Water Quality Criterion:	Santa Ana River Basin RWQCB Basin Plan: Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels which are harmful to human health.
Evaluation Guideline:	100 ng/g - OEHHA Screening Value (Brodberg and Pollock, 1999).
Data Used to Assess Water Quality:	Three out of 21 samples exceeded the evaluation guideline. All 21 samples were filet composites representing the following species: Barred Surfperch, Black Surfperch, California Corbina, Diamond Turbot, Shiner Surfperch, Spotted Scorpionfish, Spotted turbot, Waleye Surfperch, White Croaker, and Yellowfin Croaker. Walleye Surfperch from Balboa Pier and Newport Beach exceeded the guideline. Shiner Surfperch from

	Newport Beach and Newport Jetty also exceeded guideline (TSMP, 2002). There is a fish advisory for DDT and PCBs.
Spatial Representation:	Four stations were sampled: Newport Beach (Newport Pier, Newport Beach) and Balboa Beach (Balboa Pier, Newport Jetty).
Temporal Representation:	Samples were collected in May, June, August, October, November 1999 and April 2000.
Data Quality Assessment:	CFCP 1998 Year 1 QA Summary: Pesticides and PCBs. California Department of Fish and Game. CDFG Fish and Wildlife Water Pollution Control Laboratory Data Quality Assurance Report. 1999 Coastal Fish Contamination Program (CFCP Year 2). California Department of Fish and Game.

Region 8

Water Segment:	Balboa Beach
Pollutant:	Dieldrin
Decision:	List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 21 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Lines of Evidence:

Numeric Line of Evidence	Pollutant-Tissue
Beneficial Use:	CM - Commercial and Sport Fishing (CA)
Matrix:	Tissue
Water Quality Objective/ Water Quality Criterion:	Santa Ana River Basin RWQCB Basin Plan: Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels which are harmful to human health.
Evaluation Guideline:	2.0 ng/g - OEHHA Screening Value (Brodberg and Pollock, 1999).
Data Used to Assess Water Quality:	Two out of 21 samples exceeded the evaluation guideline. All 21 samples were filet composites representing the following species: barred surfperch, black surfperch, California corbina, diamond turbot, shiner surfperch, spotted scorpionfish, spotted turbot, walleye surfperch, white croaker, and yellowfin croaker. Only walleye surfperch and shiner surfperch from Newport Beach exceeded guideline. Dieldrin in all other

	samples was not detected at the detection limit of 2.0 ng/g (TSMP, 2000).
Spatial Representation:	Four stations were sampled: Newport Beach (Newport Pier, Newport Beach) and Balboa Beach (Balboa Pier, Newport Jetty).
Temporal Representation:	Samples were collected in May, June, August, October, November 1999 and April 2000.
Data Quality Assessment:	CFCP 1998 Year 1 QA Summary - Pesticides and PCBs. California Department of Fish and Game. CDFG Fish and Wildlife Water Pollution Control Laboratory Data Quality Assurance Report. 1999 Coastal Fish Contamination Program (CFCP Year 2). California Department of Fish and Game.

Region 8

Water Segment:	Balboa Beach
Pollutant:	Polychlorinated biphenyls
Decision:	List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of the 21 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Lines of Evidence:

Numeric Line of Evidence	Pollutant-Tissue
Beneficial Use:	CM - Commercial and Sport Fishing (CA)
Matrix:	Tissue
Water Quality Objective/ Water Quality Criterion:	Santa Ana River Basin RWQCB Basin Plan: Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels which are harmful to human health.
Evaluation Guideline:	20 ng/g OEHHA Screening Value (Brodberg and Pollock, 1999).
Data Used to Assess Water Quality:	Nine out of 21 samples exceeded the evaluation guideline. All 21 samples were filet composites representing the following species: barred surfperch, black surfperch, California corbina, diamond turbot, shiner surfperch, spotted scorpionfish, spotted turbot, walleye surfperch, white croaker, and yellowfin croaker. Four out of six samples at Newport Beach, two out of six at Newport Pier, two out of four at Balboa Pier, and

	one out of five at Newport Jetty exceeded the guideline (TSMP, 2002). There is a fish advisory for DDT and PCBs.
Spatial Representation:	Four stations were sampled: Balboa Pier, Newport Beach, Newport Jetty, and Newport Pier.
Temporal Representation:	Samples were collected in May, June, August, October, November 1999 and April 2000.

Region 8

Water Segment: Huntington Harbour

Pollutant: Chlordane

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

Multiple lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.6 the site has significant sediment toxicity and the pollutant is likely to cause or contribute to the toxic effect.

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

This conclusion is based on the staff findings that:
1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Seven of 60 samples exceeded ERM sediment guideline, and 47 of 60 samples exhibit toxicity, and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: The concentration of toxic substance in the water column, sediments or biota shall not adversely affect beneficial uses (Santa Ana RWQCB, 1995a).

Evaluation Guideline: The ERM sediment quality guideline for chlordane is 6 ng/g (ppb) dry

	weight (Long et. al., 1990).
Data Used to Assess Water Quality:	Seven of 60 sediment samples exceeded the ERM guideline (Santa Ana RWQCB, 2003b).
Spatial Representation:	Samples were collected at stations 36 through 72 in Huntington Harbour. Data were available for 32 stations (no data were included for stations 40, 45, 48, 61, and 67).
Temporal Representation:	Samples were collected on August 2001 and February 2003.
Environmental Conditions:	Samples were collected during dry season (August 2001) and wet season (February 2003).
Data Quality Assessment:	SARWQCB followed the Bight 1998 QAPP developed by SCCWRP.
QA/QC Equivalent:	Quality control data was presented.

Numeric Line of Evidence	Toxicity
Beneficial Use:	MA - Marine Habitat, SP - Fish Spawning
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: "The concentration of toxic pollutants in the water column, sediment or biota shall not adversely affect beneficial use."
Data Used to Assess Water Quality:	Forty-seven of 60 samples exceeded the 90 percent of the minimum significant difference for test species Eohaustorius estuarius. Twenty of 30 samples exhibited toxicity in the dry season (8/7/01 and 8/8/01), and 27 of 30 exhibited toxicity in the wet season (2/24/03) (Phillips et al., 1998).
Spatial Representation:	Samples were collected at 32 stations (no data were included for stations 40, 45, 48, 61, and 67).
Temporal Representation:	Samples were collected on 8/7/01, 8/8/01 and 2/24/03.
Environmental Conditions:	Samples were collected during dry (8/7/01, 8/8/01) and wet season (2/24/03).
Data Quality Assessment:	SARQWCB followed the Bight 1998 QAPP developed by SCCWRP.

Region 8

Water Segment: Huntington Harbour

Pollutant: Lead

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 two lines of evidence are necessary to assess listing status. One line of evidence documents toxicity and the other line of evidence associates the observed toxicity with a pollutant or pollutants.

Two lines of evidence are available in the administrative record to assess this pollutant. Toxicity is observed and a sufficient number of samples exceed the PEL sediment quality guideline.

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

This conclusion is based on the staff findings that:
1. A 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. Seven of 60 samples exceeded the PEL sediment quality guideline and this exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: The concentration of toxic substance in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).

Evaluation Guideline: PEL sediment quality guideline for lead is 112.18 µg/g/dw.

Data Used to Assess Water Quality:	Seven of 60 sediment samples were collected and exceeded the PEL sediment quality guideline (Santa Ana RWQCB, 2003b).
Spatial Representation:	Samples were collected at stations 36 thru 72 in Huntington Harbour. Data were available for 32 stations (no data were included for stations 40, 45, 48, 61, and 67.)
Temporal Representation:	Samples were collected on 08/08/2001 and 02/27/2003.
Environmental Conditions:	Samples were collected during dry season (8/8/01) and wet season (2/27/03).
Data Quality Assessment:	SARWQCB followed the Bight 1998 QAPP developed by SCCWRP.
QA/QC Equivalent:	Quality control data was presented.

Numeric Line of Evidence	Toxicity
Beneficial Use:	MA - Marine Habitat, SP - Fish Spawning
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: "The concentration of toxic pollutants in the water column, sediment or biota shall not adversely affect beneficial use."
Data Used to Assess Water Quality:	Forty-seven of 60 samples exceeded the 90 percent of the minimum significant difference for test species Eohaustorius estuarius. Twenty of 30 samples exhibited toxicity in the dry season (8/7/01 and 8/8/01), and 27 of 30 exhibited toxicity in the wet season (2/24/03) (Phillips et al., 1998).
Spatial Representation:	Samples were collected at 32 stations (no data were included for stations 40, 45, 48, 61, and 67).
Temporal Representation:	Samples were collected on 8/7/01, 8/8/01 and 2/24/03.
Environmental Conditions:	Samples were collected during dry (8/7/01, 8/8/01) and wet season (2/24/03).
Data Quality Assessment:	SARQWCB followed the Bight 1998 QAPP developed by SCCWRP.

Region 8

Water Segment:	Huntington Harbour
Pollutant:	Sediment Toxicity
Decision:	List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 waters may be placed on the 303(d) list for toxicity alone. One line of evidence is available in the administrative record to assess this toxicity condition. A substantial number of sediment samples were toxic and a pollutant is causing or contributing to the toxic effect. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty-seven of 60 samples exceeded the 90 percent of the minimum significant difference for test species Eohaustorius estuarius. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Lines of Evidence:

Numeric Line of Evidence	Toxicity
Beneficial Use:	MA - Marine Habitat, SP - Fish Spawning
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: "The concentration of toxic pollutants in the water column, sediment or biota shall not adversely affect beneficial use."
Data Used to Assess Water Quality:	Forty-seven of 60 samples exceeded the 90 percent of the minimum significant difference for test species Eohaustorius estuarius. Twenty of 30 samples exhibited toxicity in the dry season (8/7/01 and 8/8/01), and 27 of 30 exhibited toxicity in the wet season (2/24/03) (Phillips et al.,

	1998).
Spatial Representation:	Samples were collected at 32 stations (no data were included for stations 40, 45, 48, 61, and 67).
Temporal Representation:	Samples were collected on 8/7/01, 8/8/01 and 2/24/03.
Environmental Conditions:	Samples were collected during dry (8/7/01, 8/8/01) and wet season (2/24/03).
Data Quality Assessment:	SARQWCB followed the Bight 1998 QAPP developed by SCCWRP.

Region 8

Water Segment: Newport Bay, Lower

Pollutant: Chlordane

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under sections 3.5 and 3.6 a single line of evidence is necessary to assess listing status.

Currently, Newport Bay, lower, is listed for pesticides. It is not possible, in a general listing, to determine which specific pesticide could be causing or contributing to a water quality impacts. There is sufficient justification for removing the general listings for pesticides from the 303(d) list and replace these general listings with the specific pesticides when found to be exceeding.

Four lines of evidence are available in the administrative record to assess this pollutant. Enough samples exceeded the sediment guideline and exhibited toxicity.

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 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 51 tissue samples taken exceed the chlordane screening value, and 8 of 11 sediment samples exceed the sediment guideline, and 15 of 22 sediment samples exhibited toxicity and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: CM - Commercial and Sport Fishing (CA), MA - Marine Habitat, SH - Shellfish Harvesting, SP - Fish Spawning, WI - Wildlife Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Five of 11 sediment samples exhibited toxicity to amphipods. Ten of 11 samples showed porewater toxicity to purple urchin larval development. Four of 11 sites showed degraded benthic communities (Phillips et al. 1998).
Spatial Representation:	Multiple sample locations throughout Lower Newport Bay.
Temporal Representation:	Samples were taken from 1994-1997.
Data Quality Assessment:	BPTCP QAPP.

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat, SH - Shellfish Harvesting, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Evaluation Guideline:	The sediment quality guideline for chlordane dry weight is 6 ppb dw.
Data Used to Assess Water Quality:	Eight of 11 sediment samples exceeded the guideline (Phillips at al. 1998).
Spatial Representation:	Lower Newport Bay.
Temporal Representation:	1994.
Data Quality Assessment:	BPTCP QAPP.

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat, SH - Shellfish Harvesting, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Evaluation Guideline:	An applicable sediment guideline is not available for alpha chlordane alone but an ERM for total chlordane of 6 ng/g dw is applicable for the protection of aquatic life.
Data Used to Assess Water Quality:	In May 2001 one sediment sample was taken at station NB3, and in March 2002 three samples were taken at station NB3. None of these samples exceeded the ERM guideline (Bay et al. 2004).
Spatial Representation:	Sampling occurred in May 2001 and March 2002.
Temporal Representation:	Sample taken at station NB3.
Data Quality Assessment:	SCCWRP QAPP was used.

Numeric Line of Evidence	Pollutant-Tissue
Beneficial Use:	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat, SH - Shellfish Harvesting, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Tissue
Water Quality Objective/ Water Quality Criterion:	The OEHHA screening value is 30 µg/kg (ppb) wet weight (Brodberg and Pollock, 1999).
Data Used to Assess Water Quality:	None of 51 samples exceeded the OEHHA screening value (TSMP, 2000).
Spatial Representation:	Forty samples were in the outer and 11 from the inner Lower Newport Bay.
Temporal Representation:	Samples were collected in November 2000-January 2001, June-July 2001, and March-April & August-September 2002.
Data Quality Assessment:	SCCWRP QAPP was used.

Region 8

Water Segment:	Newport Bay, Lower
Pollutant:	Copper
Decision:	List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. A sufficient number of samples exceed the CTR criteria. Sediment toxicity has been documented, but none of the samples exceeded the sediment quality guideline in this water body. Currently, Newport Bay, Lower is listed for metals. It is not possible in a general listing to determine which specific metals are found to be exceeding water quality objectives. There is sufficient justification for removing the general listing for metals from the 303(d) list and replacing the general listing with the specific metals found to be exceeding water quality objectives. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 2 samples exceeded the CTR criteria. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards for the pollutant are exceeded.

Lines of Evidence:

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/	The concentration of toxic substances in the water column, sediments or

Water Quality Criterion:	biota shall not adversely affect beneficial uses.
Evaluation Guideline:	The ERM sediment quality guideline for copper is 270 µg/g (ppm) dry weight (Long et al., 1995).
Data Used to Assess Water Quality:	None of 3 samples exceeded the ERM (Bay and Greenstein, 2003).
Spatial Representation:	Samples were collected at the Lower Newport Bay at stations 2137, 2136, and 2142.
Temporal Representation:	Sample were collected in May 2002.
Data Quality Assessment:	SCCWRP QAPP was used.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	CTR Criterion Continuous Concentration for dissolved Copper in saltwater is 3.1 µg/l for the protection of aquatic life.
Data Used to Assess Water Quality:	Two of two samples taken at different sampling stations exceeded the CTR CCC Criteria (Bay and Greenstein, 2003).
Spatial Representation:	Two sample sites located in Lower Newport Bay at Harbor Inner Reach and at the PCH Bridge.
Temporal Representation:	Samples were taken on 10/29/02.
Data Quality Assessment:	USEPA Quality Assurance Plan.

Region 8

Water Segment: Newport Bay, Lower

Pollutant: DDT

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Multiple lines of evidence are available in the administrative record to assess this pollutant. A sufficient number of tissue samples exceed the OEHHA screening value. Toxicity has been documented in sediment and there is significant biological community degradation in the water segment. However, it is not possible to determine exceedances of sediment samples because there are no applicable sediment quality guidelines for DDT.

Currently, Newport Bay, lower, is listed for pesticides. It is not possible, in a general listing, to determine which specific pesticide could be causing or contributing to water quality impacts. There is sufficient justification for removing the general listing for pesticides from the 303(d) list and replacing it with the specific pesticides, when found to be exceeding.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant 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 measurements used satisfy the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfy the data quantity requirements of section 6.1.5 of the Policy.
3. Eighteen of 56 tissue samples exceed the OEHHA screening value which exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. There is significant sediment toxicity and biological community degradation documented. Exceedances in sediment samples cannot be determined because there is no applicable sediment quality guideline for this pollutant.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

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:	Santa Ana River Basin RWQCB Basin Plan: Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels which are harmful to human health.
Evaluation Guideline:	100 ng/g (OEHHA Screening Value) (Brodberg and Pollock, 1999).
Data Used to Assess Water Quality:	Two of 5 samples exceeded. All 5 samples were filet composites representing the following species: diamond turbot, shiner surfperch, spotted turbot, and yellowfin croaker. Two samples of shiner surfperch exceeded guideline (Allen et al. 2004).
Spatial Representation:	One station was sampled located at Pacific Coast Highway Bridge in Newport Bay.
Temporal Representation:	Samples were collected in May and October 1999.
Data Quality Assessment:	CFCP 1998 Year 1 QA Summary of` 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). Department of Fish and Game.

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat
Matrix:	Sediment
Evaluation Guideline:	There is no applicable sediment quality guideline available.
Data Used to Assess Water Quality:	Three samples were collected (Bay and Greenstein. 2003).
Spatial Representation:	Samples were collected at sites 2137, 2136, and 2142 in lower Newport Bay.
Temporal Representation:	Samples were collected in May 2002.
Data Quality Assessment:	SCCWRP QAPP was used.

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:	Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels harmful to humans.

Evaluation Guideline:	The OEHHA screening value is 100 µg/kg (ppb) wet weight (Brodberg and Pollock, 1999).
Data Used to Assess Water Quality:	Sixteen of 51 samples exceeded the OEHHA screening value. Ten of 40 sample exceeded in the outer and 6 of 11 exceeded in the inner Lower Newport Bay. Three of the 18 samples collected between June - July 2001 in the outer Lower Bay were 2 - 4 times higher than the OEHHA screening value of 100 µg/L (Allen et al. 2004).
Spatial Representation:	Samples were collected in the Lower Newport Bay in the inner and outer Lower Bay.
Temporal Representation:	Samples were collected in November 2000-January 2001, June-July 2001, and March-April & August-September 2002. In the outer bay, 1 sample exceeded during November 200 - January 2001; and 6 samples during June - July 2001; and 3 samples exceeded during March-April and August-September 2001. In the inner bay; 1 sample exceeded during June-July 2001 and 5 during March-April and August-September 2001.
Data Quality Assessment:	SCCWRP QAPP was used.
QA/QC Equivalent:	The report shows evidence of lab QC such as spikes and replicates.

Numeric Line of Evidence	Population/Community Degradation
Beneficial Use:	MA - Marine Habitat, RA - Rare & Endangered Species
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective for Toxic substances: the concentration of toxic substances in the water column, sediments, and biota shall not adversely affect beneficial uses.
Data Used to Assess Water Quality:	Four of 16 samples exhibited significant biological community degradation (Phillips et al. 1998).
Spatial Representation:	Samples were collected from 16 sites.
Temporal Representation:	Samples were collected in September 1994, June 1996, and August 1997.
Data Quality Assessment:	Study was conducted by the California Department of Fish and Game.
QA/QC Equivalent:	QA/QC information is contained in the document.

Region 8

Water Segment: Newport Bay, Lower

Pollutant: Polychlorinated biphenyls

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list under section 3.5 and 3.6 of the Listing Policy.

Currently, Newport Bay is listed for organics. It is not possible, in a general listing, to determine which specific pollutant is causing or contributing to a water quality impacts. There is sufficient justification for removing the general listings for organics from the 303(d) list and replace these general listings with the specific pollutants when found to be exceeding.

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. There were 28 of 131 samples that exceeded the guidelines, and this exceeds the allowable frequency of table 3.1 in the Listing Policy. Sediment toxicity is also documented in this water body and this pollutant could cause or contribute to the toxic effect.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

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

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Santa Ana River Basin RWQCB Basin Plan: Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels which are harmful to human health.

Evaluation Guideline: OEHHA Screening Value 20 ng/g (Brodberg and Pollock, 1999).

Data Used to Assess Water Quality:	Three out of 5 samples exceeded. All 5 samples were filet composites representing the following species: diamond turbot, shiner surfperch, spotted turbot, and yellowfin croaker. Two samples of shiner surfperch and one yellowfin croaker exceeded the guideline (TSMP, 2002).
Spatial Representation:	One station was sampled located at Pacific Coast Highway Bridge in Newport Bay.
Temporal Representation:	Samples were collected in May and October 1999.
Data Quality Assessment:	CFCP 1998 Year 1 QA Summary: Pesticides and PCBs. California Department of Fish and Game. CDFG Fish and Wildlife Water Pollution Control Laboratory Data Quality Assurance Report. 1999 Coastal Fish Contamination Program (CFCP Year 2). California Department of Fish and Game.

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	MA - Marine Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.
Evaluation Guideline:	The sediment quality guideline is 400 ng/g (ppb) dry weight (MacDonald et al., 2000).
Data Used to Assess Water Quality:	None of the 3 samples exceeded the sediment quality guideline (Bay and Greenstein, 2003).
Spatial Representation:	Samples were collected at sites 2137, 2136, and 2142 in the Lower Newport Bay.
Temporal Representation:	Samples were collected in May 2002.
Data Quality Assessment:	SCCWRP QAPP was used.

Numeric Line of Evidence	Pollutant-Tissue
Beneficial Use:	CM - Commercial and Sport Fishing (CA), SH - Shellfish Harvesting
Matrix:	Tissue
Water Quality Objective/ Water Quality Criterion:	Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels harmful to humans.
Evaluation Guideline:	The OEHHA value for fish consumption is 20 µg/kg (ppb) wet weight (Brodberg and Pollock, 1999).
Data Used to Assess Water Quality:	Nine of 51 samples exceeded the OEHHA standard (4 of 30 outer and 6 of 11 inner) (TSMP, 2002).
Spatial Representation:	Samples were collected in inner and outer Lower Newport Bay.
Temporal Representation:	Samples were collected in November 2000-January 2001, June-July 2001, and March-April & August-September 2002.
Data Quality Assessment:	SCCWRP QAPP was used.

QA/QC Equivalent:	The report shows evidence of lab QC such as spikes and replicates.

Line of Evidence	Pollutant-Tissue
Beneficial Use	CM - Commercial and Sport Fishing (CA), SH - Shellfish Harvesting
Evaluation Guideline:	The 20 ppb (ww) OEHHA screening value was used (Brodberg and Pollock, 1999).
Data Used to Assess Water Quality:	Sixteen of 72 samples exceeded the OEHHA standard. The summary reports that 7 of 21 samples were in exceeded in 2001 and 9 of 51 exceeded in 2003.
Spatial Representation:	Samples were collected at the Lower Newport Bay at NPDES monitoring stations.
Temporal Representation:	Assessment summaries were written for data as of 06/2001 and 04/2003.

Region 8

Water Segment:	Newport Bay, Lower
Pollutant:	Sediment Toxicity
Decision:	List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. A sufficient number of the sediment samples show toxicity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty six of 74 samples show toxicity, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Lines of Evidence:

Numeric Line of Evidence	Toxicity
Beneficial Use:	MA - Marine Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Toxicity Results: Three of 5 sediment samples were significantly toxic to amphipod survival. Five of 5 water samples collected had significant effect in Purple Urchin fertilization. None of 2 water samples collected were toxic to Mysid growth. Two of 2 sediment water interface samples were significantly toxic to the Purple Sea Urchin fertilization test (Bay et al. 2004).

Spatial Representation:	Samples were taken at stations NB6, NB7, NB8, NB9, and NB10.
Temporal Representation:	Samples were taken in May 2001.
Data Quality Assessment:	SCCRWP QAPP.

Numeric Line of Evidence	Toxicity
Beneficial Use:	MA - Marine Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Toxicity Results (Phillips et al. 1998). -Five of 15 sediment samples exhibited significantly toxic to amphipods. -Fifteen of 15 pore water samples collected had significant effect on Purple Urchin larval development. -One of 15 sediment water interface samples was significantly toxic to Purple Sea Urchin. -Five of 15 sediment water interface samples were significantly toxic to the fertilization test.
Spatial Representation:	Samples were collected from 13 sites.
Temporal Representation:	Samples were collected in September 1994, June 1996, and August 1997.
Data Quality Assessment:	Study was conducted by the California Department of Fish and Game.
QA/QC Equivalent:	QA/QC information is contained in the document.

Region 8

Water Segment:	Newport Bay, Upper (Ecological Reserve)
Pollutant:	Chlordane
Decision:	List
Weight of Evidence:	These pollutants are being considered for listing under sections 3.1 and 3.6 of the Listing Policy. Under sections 3.1 and 3.6 a single line of evidence is necessary to assess listing status. Currently, Newport Bay, Upper, is listed for pesticides. It is not possible, in a general listing, to determine which specific pollutant is causing or contributing to a water quality impacts. There is sufficient justification for removing the general listings for pesticides from the 303(d) list and replace these general listings with the specific pollutants when found to be exceeding. Sediment toxicity has been documented in this water body, and enough sediment samples exceed the guideline. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. This conclusion is based on the staff findings that: 1. The water and sediment data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The water and sediment data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 11 sediment samples exceed the sediment quality guideline. And a large number of sediment samples exhibit sediment toxicity in this water body. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are being exceeded.
Lines of Evidence:	

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/	The concentration of toxic substances in the water column, sediments or

Water Quality Criterion:	biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Evaluation Guideline:	An applicable sediment guideline is not available for alpha chlordane alone but an ERM for total chlordane of 6 ng/g dw is applicable for the protection of aquatic life.
Data Used to Assess Water Quality:	Four samples were collected. However, none of these samples exceeded the sediment guideline (Bay et al. 2004).
Spatial Representation:	Three samples were collected in March 2002 at the Upper Newport Bay at stations NB10, NB10b and NB10c. And one sample was collected at NB10 in May 2001.
Temporal Representation:	Samples were collected in May 2001 and March 2002.
Data Quality Assessment:	SCCWRP QAPP was used.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Evaluation Guideline:	Chlordane CTR criteria for protection of human health consumption of aquatic life is 0.00059 ppb.
Data Used to Assess Water Quality:	Two samples were collected. The exceedances could not be determined, because there in no water column criteria applicable to alpha chlordane alone (Bay and Greenstein, 2003).
Spatial Representation:	Samples were collected in the Upper Newport Bay in the Upper Bay (NB10).
Temporal Representation:	Samples were collected in November 2001 and March 2002.
Data Quality Assessment:	SCCWRP QAPP was used.

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Evaluation Guideline:	The sediment quality guideline dry weight is 6 ppb dw.
Data Used to Assess Water Quality:	Three of 7 samples exceeded the guideline (Phillips et al. 1998).
Spatial Representation:	Lower Newport Bay.
Temporal Representation:	1994-1996.

Data Quality Assessment:	BPTCP QAPP.

Numeric Line of Evidence	Toxicity
Beneficial Use:	MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Toxicity Results: Five of 15 sediment samples were significantly toxic to amphipods. Fifteen of 15 pore water samples collected had significant effect in Purple Urchin larval development. One of 15 sediment water interface samples was significantly toxic to Purple Sea Urchin. Five of 15 sediment water interface samples were significantly toxic to the fertilization test (Phillips et al. 1998).
Spatial Representation:	Samples were collected from 15 sites.
Temporal Representation:	Samples were collected in September 1994, June 1996, and August 1997.
Data Quality Assessment:	Study was conducted by the California Department of Fish and Game.
QA/QC Equivalent:	QA/QC information is contained in the document.

Numeric Line of Evidence	Toxicity
Beneficial Use:	MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Toxicity Results: Four of 5 sediment samples were significantly toxic to amphipod survival. One of 5 water samples collected had significant effect in Purple Urchin fertilization. None of 2 water samples collected were toxic to Mysid growth. Two of 3 sediment water interface samples were significantly toxic to the Purple Sea Urchin fertilization test (Bay et al., 2004).
Spatial Representation:	Samples were taken at stations NB1, NB2, NB3, NB4, and NB5.
Temporal Representation:	The samples were taken in May 2001.
Data Quality Assessment:	SCCRWP QAPP.

Region 8

Water Segment: Newport Bay, Upper (Ecological Reserve)

Pollutant: Copper

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 one line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. A sufficient number of samples exceed the CTR criteria. Sediment toxicity has been documented, and none of the sediment samples exceeded the sediment quality guideline for copper in this water body.

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 6 water samples exceeded the CTR criteria. Sediment toxicity has been documented, but none of the sediment samples exceeded the sediment quality guideline for copper in this water body.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Currently, Newport Bay, upper, is listed for metals. It is not possible in a general listing to determine which specific metal is causing or contributing to a water quality impacts. There is sufficient justification for removing the general listings for metals from the 303(d) list and replace these general listings with the specific metals found to be exceeding.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:	CTR Criterion Continuous Concentration for dissolved Copper in saltwater is 3.1 µg/l for the protection of aquatic life.
Data Used to Assess Water Quality:	Two of four samples taken at different sampling stations exceeded the CTR CCC Criteria (USEPA. 2004).
Spatial Representation:	Four sampling sites located in Upper Newport Bay at North Star Beach and at the mouth of San Diego Creek.
Temporal Representation:	Samples taken between 8/28/01 and 10/29/02.
Data Quality Assessment:	USEPA Quality Assurance plan

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	The concentration of toxic substance in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Evaluation Guideline:	The ERM sediment quality guideline for copper is 270 µg/g (ppm) dry weight (Long et al., 1995).
Data Used to Assess Water Quality:	None of the 2 samples exceeded the ERM sediment quality guideline. One sample was collected on each day at each location for each metal constituent. Acid volatile results indicate no pore water problem due to copper (Bay and Greenstein, 2003).
Spatial Representation:	Samples were collected in the Upper Newport Bay (NB10).
Temporal Representation:	Samples were collected in November 2001 and March 2002.
Data Quality Assessment:	SCCWRP QAPP was used.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	From the CTR saltwater chronic criteria is 3.1 µg/L.
Data Used to Assess Water Quality:	None of the 2 samples exceeded the CTR criteria (USEPA, 2004)
Spatial Representation:	Samples were collected at Upper Newport Bay (NB10)
Temporal Representation:	Samples were collected in November 2001 and March 2002. One sample was collected on each day.
Data Quality Assessment:	SCCWRP QAPP was used.

Numeric Line of Evidence	Toxicity

Beneficial Use:	MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Toxicity Results: Five of 15 sediment samples were significantly toxic to amphipods. Fifteen of 15 pore water samples collected had significant effect in Purple Urchin larval development. One of 15 sediment water interface samples was significantly toxic to Purple Sea Urchin. Five of 15 sediment water interface samples were significantly toxic to the fertilization test (Phillips et al. 1998).
Spatial Representation:	Samples were collected from 15 sites.
Temporal Representation:	Samples were collected in September 1994, June 1996, and August 1997.
Data Quality Assessment:	Study was conducted by the California Department of Fish and Game.
QA/QC Equivalent:	QA/QC information is contained in the document.

Numeric Line of Evidence	Toxicity
Beneficial Use:	MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Toxicity Results: Four of 5 sediment samples were significantly toxic to amphipod survival. One of 5 water samples collected had significant effect in Purple Urchin fertilization. None of 2 water samples collected were toxic to Mysid growth. Two of 3 sediment water interface samples were significantly toxic to the Purple Sea Urchin fertilization test (Bay et al., 2004).
Spatial Representation:	Samples were taken at stations NB1, NB2, NB3, NB4, and NB5.
Temporal Representation:	The samples were taken in May 2001.
Data Quality Assessment:	SCCRWP QAPP.

Region 8

Water Segment:	Newport Bay, Upper (Ecological Reserve)
Pollutant:	DDT
Decision:	List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eleven of 30 samples exceeded the 100 µg/kg (ppb) wet weight OEHHA screening value. For toxicity; 5 of 15 sediment samples were significantly toxic to amphipods. Fifteen of 15 pore water samples collected had significant effect in Purple Urchin larval development. One of 15 sediment water interface samples were was significantly toxic to Purple Sea Urchin. Five of 15 sediment water interface samples were significantly toxic to the fertilization test. For benthic degradation; 4 of 16 samples exhibited significant biological community degradation. Three samples were collected, however number of exceedances cannot be determined due to the unavailability of an applicable sediment quality guideline for total DDT. The tissue sample exceedances meet the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Lines of Evidence:

Numeric Line of Evidence	Population/Community Degradation
Beneficial Use:	ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/	Narrative Water Quality Objective: Toxic substances. The concentration

Water Quality Criterion:	of toxic substances in the water column, sediments, biota shall not adversely affect beneficial uses.
Data Used to Assess Water Quality:	Four of 16 samples exhibited significant biological community degradation (Phillips et al. 1998).
Spatial Representation:	Samples were collected from 16 sites.
Temporal Representation:	Samples were collected in September 1994, June 1996, and August 1997.
Data Quality Assessment:	QAPP Information. Study was conducted by the California Department of Fish and Game.
QA/QC Equivalent:	QA/QC information is contained in the document.

Numeric Line of Evidence	Toxicity
Beneficial Use:	MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Toxicity Results: Five of 15 sediment samples were significantly toxic to amphipods. Fifteen of 15 pore water samples collected had significant effect in Purple Urchin larval development. One of 15 sediment water interface samples was significantly toxic to Purple Sea Urchin. Five of 15 sediment water interface samples were significantly toxic to the fertilization test (Phillips et al. 1998).
Spatial Representation:	Samples were collected from 15 sites.
Temporal Representation:	Samples were collected in September 1994, June 1996, and August 1997.
Data Quality Assessment:	Study was conducted by the California Department of Fish and Game.
QA/QC Equivalent:	QA/QC information is contained in the document.

Numeric Line of Evidence	Toxicity
Beneficial Use:	MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Toxicity Results: Four of 5 sediment samples were significantly toxic to amphipod survival. One of 5 water samples collected had significant effect in Purple Urchin fertilization. None of 2 water samples collected were toxic to Mysid growth. Two of 3 sediment water interface samples were significantly toxic to the Purple Sea Urchin fertilization test (Bay et

	al., 2004).
Spatial Representation:	Samples were taken at stations NB1, NB2, NB3, NB4, and NB5.
Temporal Representation:	The samples were taken in May 2001.
Data Quality Assessment:	SCCRWP QAPP.

Numeric Line of Evidence	Pollutant-Tissue
Beneficial Use:	CM - Commercial and Sport Fishing (CA)
Matrix:	Tissue
Water Quality Objective/ Water Quality Criterion:	Santa Ana River Basin RWQCB Basin Plan: Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels which are harmful to human health.
Evaluation Guideline:	OEHHA Screening Value 100 ng/g wet weight (Brodberg and Pollock, 1999).
Data Used to Assess Water Quality:	Three out of 7 samples exceeded the screening value. Filet composite samples of diamond turbot (1997) and striped mullet (2002) were collected. Individual samples of brown smoothhound shark (1998), orangemouth corvina (1999), California halibut (2000), round stingray (2001), and spotted sand bass (2002) were also collected. The guideline was exceeded in the diamond turbot, striped mullet, and spotted sand bass samples (TSMP, 2002).
Spatial Representation:	Two stations in Upper Newport Bay were sampled: at the mouth of the channel, around the corner into the preserve from the DFG Marine Studies Center (Ecological Reserve); and at the Newport Dunes Aquatic Park across from the public boat launch ramp (Newport Dunes).
Temporal Representation:	Samples were collected annually 1997-2002.
Data Quality Assessment:	Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish and Game. Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish and Game.

Numeric Line of Evidence	Pollutant-Tissue
Beneficial Use:	CM - Commercial and Sport Fishing (CA)
Matrix:	Tissue
Water Quality Objective/ Water Quality Criterion:	Toxic Substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels harmful to humans (SARWQCB, 1995).
Evaluation Guideline:	The OEHHA screening value for DDT is 100 µg/kg (ppb) wet weight (Brodberg and Pollock, 1999).
Data Used to Assess Water Quality:	Eight of 23 samples exceeded the OEHHA screening value. Of the 23 samples; 4 of 19 were exceeding in the outer bay and 4 of 4 were

	exceeding in the inner bay (Allen et al. 2004).
Spatial Representation:	Samples were collected in inner and outer Upper Newport Bay.
Temporal Representation:	Samples were collected in November 2000-January 2001 (0 samples exceeded), 2 samples exceeded in the outer upper bay between June-July 2001. Three samples exceeded in the outer upper bay and 4 samples exceeded in the inner upper bay between March-April & August-September 2002.
Data Quality Assessment:	SCCWRP QAPP was used.
QA/QC Equivalent:	The report shows evidence of lab QC such as spikes and replicates.

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	ES - Estuarine Habitat, MA - Marine Habitat, R1 - Water Contact Recreation
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Evaluation Guideline:	There is no applicable sediment quality guideline available for total DDT.
Data Used to Assess Water Quality:	Three samples were collected (Bay and Greenstein, 2003).
Spatial Representation:	Samples were collected in the Upper Newport Bay at NB10, NB10b, and NB10c.
Temporal Representation:	Samples were collected in November 2001 and March 2002.
Data Quality Assessment:	SCCWRP QAPP was used.
QA/QC Equivalent:	The report shows evidence of lab QC such as spikes and replicates.

Region 8

Water Segment:	Newport Bay, Upper (Ecological Reserve)
Pollutant:	Polychlorinated biphenyls
Decision:	List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1, and 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status. There are five lines of evidence available in the administrative record to assess this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of 30 samples exceeded the OEHHA screening value and this does exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Although sediment toxicity has been documented in this water body, none of 4 samples exceeded the dry weight sediment quality guideline. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards for the pollutant are exceeded.

Lines of Evidence:

Numeric Line of Evidence	Pollutant-Tissue
Beneficial Use:	CM - Commercial and Sport Fishing (CA)
Matrix:	Tissue
Water Quality Objective/ Water Quality Criterion:	Santa Ana River Basin RWQCB Basin Plan: Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels which are harmful to human health.
Evaluation Guideline:	The OEHHA screening value for polychlorinated biphenyls is 20 µg/kg (ppb) wet weight (Brodberg and Pollock, 1999).
Data Used to Assess Water Quality:	Three out of 7 samples exceeded. Filet composite samples of diamond turbot (1997) and striped mullet (2002) were collected. Individual

	samples of brown smoothhound shark (1998), orangemouth corvina (1999), California halibut (2000), round stingray (2001), and spotted sand bass (2002) were also collected. The guideline was exceeded in the orangemouth corvina, striped mullet, and spotted sand bass samples (TSMP, 2002).
Spatial Representation:	Two stations in Upper Newport Bay were sampled: mouth of the channel, around the corner into the preserve from the DFG Marine Studies Center (Ecological Reserve); and Newport Dunes Aquatic Park across from the public boat launch ramp (Newport Dunes).
Temporal Representation:	Samples were collected annually 1997-2002.
Data Quality Assessment:	Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish and Game. Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish and Game.

Numeric Line of Evidence	Pollutant-Tissue
Beneficial Use:	CM - Commercial and Sport Fishing (CA)
Matrix:	Tissue
Water Quality Objective/ Water Quality Criterion:	Toxic Substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels harmful to humans (SARWQCB, 1995).
Evaluation Guideline:	The OEHHA screening value for polychlorinated biphenyls is 20 µg/kg (ppb) wet weight (Brodberg and Pollock, 1999).
Data Used to Assess Water Quality:	One of the 23 samples exceeded the OEHHA screening value (TSMP, 2002).
Spatial Representation:	Nineteen samples were collected from the inner bay and 4 from the outer bay.
Temporal Representation:	Samples were collected in November 2000-January 2001, June-July 2001, and March-April & August-September 2002.
Data Quality Assessment:	SCCWRP QAPP was used.
QA/QC Equivalent:	The report shows evidence of lab QC such as spikes and replicates.

Numeric Line of Evidence	Toxicity
Beneficial Use:	MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water	Toxicity Results: Five of 15 sediment samples were significantly toxic to

Quality:	amphipods. Fifteen of 15 pore water samples collected had significant effect in Purple Urchin larval development. One of 15 sediment water interface samples was significantly toxic to Purple Sea Urchin. Five of 15 sediment water interface samples were significantly toxic to the fertilization test (Phillips et al. 1998).
Spatial Representation:	Samples were collected from 15 sites.
Temporal Representation:	Samples were collected in September 1994, June 1996, and August 1997.
Data Quality Assessment:	Study was conducted by the California Department of Fish and Game.
QA/QC Equivalent:	QA/QC information is contained in the document.

Numeric Line of Evidence	Toxicity
Beneficial Use:	MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Toxicity Results: Four of 5 sediment samples were significantly toxic to amphipod survival. One of 5 water samples collected had significant effect in Purple Urchin fertilization. None of 2 water samples collected were toxic to Mysid growth. Two of 3 sediment water interface samples were significantly toxic to the Purple Sea Urchin fertilization test (Bay et al., 2004).
Spatial Representation:	Samples were taken at stations NB1, NB2, NB3, NB4, and NB5.
Temporal Representation:	The samples were taken in May 2001.
Data Quality Assessment:	SCCRWP QAPP.

Line of Evidence	Pollutant-Sediment
Beneficial Use	ES - Estuarine Habitat, MA - Marine Habitat, R1 - Water Contact Recreation
Non-Numeric Objective:	The concentration of toxic substance in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Evaluation Guideline:	The sediment quality guideline is 400 ng/g (ppb) dry weight (MacDonald et al., 2000)
Data Used to Assess Water Quality:	None of the 4 samples exceeded the sediment quality guideline (Bay and Greenstein, 2003).
Spatial Representation:	Samples were collected in the Upper Newport Bay at NB10, NB10b, and NB10c.
Temporal Representation:	One sample was collect at NB10 in November 2001, one sample was collected at each of following sites NB10, NB10b, and NB10c on March 2002.

Region 8

Water Segment:	Newport Bay, Upper (Ecological Reserve)
Pollutant:	Sediment Toxicity
Decision:	List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. A sufficient number of the sediment samples show toxicity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-three of 75 samples show sediment toxicity, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Lines of Evidence:

Numeric Line of Evidence	Toxicity
Beneficial Use:	MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Toxicity Results: Five of 15 sediment samples were significantly toxic to amphipods. Fifteen of 15 pore water samples collected had significant effect in Purple Urchin larval development. One of 15 sediment water interface samples was significantly toxic to Purple Sea Urchin. Five of 15

	sediment water interface samples were significantly toxic to the fertilization test (Phillips et al. 1998).
Spatial Representation:	Samples were collected from 15 sites.
Temporal Representation:	Samples were collected in September 1994, June 1996, and August 1997.
Data Quality Assessment:	Study was conducted by the California Department of Fish and Game.
QA/QC Equivalent:	QA/QC information is contained in the document.

Numeric Line of Evidence	Toxicity
Beneficial Use:	MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Toxicity Results: Four of 5 sediment samples were significantly toxic to amphipod survival. One of 5 water samples collected had significant effect in Purple Urchin fertilization. None of 2 water samples collected were toxic to Mysid growth. Two of 3 sediment water interface samples were significantly toxic to the Purple Sea Urchin fertilization test (Bay et al., 2004).
Spatial Representation:	Samples were taken at stations NB1, NB2, NB3, NB4, and NB5.
Temporal Representation:	The samples were taken in May 2001.
Data Quality Assessment:	SCCRWP QAPP.

Region 8

Water Segment: Peters Canyon Channel

Pollutant: DDT

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant.

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 14 samples exceeded the NAS Guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Santa Ana River Basin RWQCB Basin Plan: Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels which are harmful to human health.

Evaluation Guideline: 1000 ng/g [NAS Guideline (whole fish)] (NAS, 1972).

Data Used to Assess Water Quality: Three out of 14 samples exceeded the guideline. A total of 13 whole fish composite samples of red shiner and one whole fish composite of flathead minnow were collected. Red shiner samples were collected in 1992-2002. Flathead minnow sample was collected in 2001. The guideline was exceeded in 1992-93 and 1998 samples of red shiner (TSMP, 2002).

Spatial Representation:	One station located upstream from Irvine Center Parkway Bridge.
Temporal Representation:	Samples were collected annually from 1992-2002.
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.

Region 8

Water Segment:	Peters Canyon Channel
Pollutant:	Toxaphene
Decision:	List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of the 14 samples exceeded the NAS Guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Lines of Evidence:

Numeric Line of Evidence	Pollutant-Tissue
Beneficial Use:	WA - Warm Freshwater Habitat
Matrix:	Tissue
Water Quality Objective/ Water Quality Criterion:	Santa Ana River Basin RWQCB Basin Plan: Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels which are harmful to human health.
Evaluation Guideline:	100 ng/g [NAS Guideline (whole fish)] (NAS, 1972).
Data Used to Assess Water Quality:	Nine out of 14 samples exceeded. A total of 13 whole fish composite samples of red shiner and one whole fish composite of fathead minnow were collected. Red shiner samples were collected in 1992-2002. Flathead minnow sample was collected in 2001. The guideline was exceeded in 1992-98 samples of red shiner. Samples from 1999-2002 did not exceed the guideline (TSMP, 2002).

Spatial Representation:	One station located upstream from Irvine Center Parkway Bridge.
Temporal Representation:	Samples were collected annually from 1992-2002.
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.

Region 8

Water Segment: Rhine Channel

Pollutant: Copper

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

Multiple lines of evidence are available in the administrative record to assess this pollutant including water, tissue and/or sediment data.

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

This conclusion is based on the staff findings that:
1. The sediment quality guideline used complies with the requirements of section 2.1.3 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 17 samples exceeded the dry weight ERM sediment quality guideline, and 12 of 18 samples exceeded the CTR saltwater chronic. Sediment toxicity has been documented in this water body and this pollutant could cause or contribute to the toxic effect. These samples exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: MA - Marine Habitat, SP - Fish Spawning, WI - Wildlife Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: The concentration of toxic substance in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).

Evaluation Guideline: The ERM sediment quality guideline for copper is 270 µg/g (ppm) dry

	weight (Long et al., 1995).
Data Used to Assess Water Quality:	Two of 2 samples exceeded the ERM guideline (Bay and Greenstein, 2003).
Spatial Representation:	The samples were collected at one site (NB3) in the Rhine Channel.
Temporal Representation:	The samples were collected in November 2001 and March 2002.
Data Quality Assessment:	SCCWRP QAPP was used.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	MA - Marine Habitat, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	The CTR chronic saltwater criteria for copper is 3.1 µg/L (ppb) (USEPA, 2000). The concentration of toxic substance in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Three of 3 samples exceeded the CTR criterion. Two of the samples were collected in the water column and one sample was collected in the sediment water interface (Bay and Greenstein, 2003).
Spatial Representation:	Samples were collected at one site (NB3) in the Rhine Channel.
Temporal Representation:	Two samples were collected in November 2001 (one from the water column and one from the sediment water interface). One water column sample was collected in March 2002.
Data Quality Assessment:	SCCWRP QAPP was used.

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	MA - Marine Habitat, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	The concentration of toxic substance in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Evaluation Guideline:	The ERM sediment quality guideline for copper is 270 µg/g (ppm) dry weight (Long et al., 1995).
Data Used to Assess Water Quality:	Fourteen of 15 samples exceeded the ERM. Samples that exceeded the ERM were collected from stations RC1 - RC14 (Bay and Greenstein, 2003).
Spatial Representation:	Samples were collected from 15 stations in Rhine Channel, Newport Bay. These stations were distributed throughout the study area.
Temporal Representation:	Samples were collected on May 14, 2002.
Data Quality Assessment:	SCCWRP QAPP was used.

Numeric Line of Evidence	Pollutant-Water

Beneficial Use:	MA - Marine Habitat, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	The CTR chronic saltwater criteria for copper is 3.1 µg/L (ppb) (USEPA, 2000). The concentration of toxic substance in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Nine of 15 samples exceeded the CTR criteria. Samples were collected from the sediment-water interface. Samples exceeding were from station RC1, RC7, RC8, RC9, RC10, RC11, RC12, and RC12 (Bay and Greenstein, 2003).
Spatial Representation:	Samples were collected from 15 stations in Rhine Channel, Newport Bay. These stations were distributed throughout the study area.
Temporal Representation:	Samples were collected on May 14, 2002
Data Quality Assessment:	SCCWRP QAPP was used.

Numeric Line of Evidence	Toxicity
Beneficial Use:	ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: Toxic substances. The concentration of toxic substances in the water column, sediments, biota shall not adversely affect beneficial uses.
Data Used to Assess Water Quality:	Toxicity Results (Bay and Greenstein, 2003). Two of 2 sediment samples were significantly toxic to amphipods. Two of 2 pore water samples collected exhibited significant effect in Purple Urchin larval development. One of 1 sediment-water interface samples was significantly toxic to Purple Sea Urchin. One of 1 sample exhibited significant toxic effect to Ampelisca.
Spatial Representation:	Samples were collected from one site in Newport Bay-Rhine Channel.
Temporal Representation:	One sample was collected in September 1994 and June 1996.
Data Quality Assessment:	Study was conducted by the California Department of Fish and Game.
QA/QC Equivalent:	QA/QC information is contained in the document.

Numeric Line of Evidence	Toxicity
Beneficial Use:	ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water	Eleven of 15 samples exhibited significant toxicity to Amphipods. In fact,

Quality:	one sample from station RC 5 had marginal toxicity and 10 samples collected from RC6 to RC15 had high toxicity (Bay and Greenstein, 2003).
Spatial Representation:	Samples were collected from 15 stations in Rhine Channel, Newport Bay. These stations were distributed throughout the study area.
Temporal Representation:	Samples were collected on May 14, 2002.
Data Quality Assessment:	SCCWRP QAPP was used.

Numeric Line of Evidence	Toxicity
Beneficial Use:	ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Ten of 15 samples exhibited significant toxicity effect to sea urchin development test in the sediment-water interface from stations RC2, RC3, RC4, RC7, RC8, RC9, RC11, RC12, RC13, and RC 14. In fact, all samples exhibited high toxicity (BPTCP, 1998).
Spatial Representation:	Samples were collected from stations RC1 - RC15 in Rhine Channel, Newport Bay.
Temporal Representation:	Samples were collected on May 14, 2002.
Data Quality Assessment:	SCCWRP QAPP was used.

Numeric Line of Evidence	Toxicity
Beneficial Use:	ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Toxicity Results: One of 1 sediment sample was significantly toxic to amphipods. None of 1 pore water sample collected exhibited significant effect in Sea Urchin fertilization. None of 1 pore water sample collected exhibited significant effect on Mysid growth. One of 1 sediment-water interface sample was significantly toxic to Sea Urchin fertilization (Bay et al. 2004).
Spatial Representation:	The samples were taken at station NB3.
Temporal Representation:	The samples were collected in May 2001.
Data Quality Assessment:	SCCWRP QAPP.

Region 8

Water Segment: Rhine Channel

Pollutant: Lead

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing.

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

This conclusion is based on the staff findings:
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 15 samples exceeded the dry weight PEL sediment quality guideline. Sediment toxicity was documented and the pollutant could cause or contribute to the toxic effect. These samples exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: The concentration of toxic substance in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).

Evaluation Guideline: The PEL sediment quality guideline for lead is 112.2 µg/g (ppm) dry weight (MacDonald et al., 1996).

Data Used to Assess Water Nine of 15 samples exceeded the PEL criteria. Samples were collected

Quality:	from the sediment-water interface. Samples exceeding were from stations RC3, RC4, RC5, RC6, RC7, RC8, RC9, and RC13 (Bay and Greenstein, 2003).
Spatial Representation:	Samples were collected from 15 stations in Rhine Channel, Newport Bay. These stations were distributed throughout the study area.
Temporal Representation:	Samples were collected on May 14, 2002.
Data Quality Assessment:	SCCWRP QAPP was used.

Numeric Line of Evidence	Toxicity
Beneficial Use:	ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: Toxic substances. The concentration of toxic substances in the water column, sediments, biota shall not adversely affect beneficial uses.
Data Used to Assess Water Quality:	Toxicity Results (Bay and Greenstein, 2003). Two of 2 sediment samples were significantly toxic to amphipods. Two of 2 pore water samples collected exhibited significant effect in Purple Urchin larval development. One of 1 sediment-water interface samples was significantly toxic to Purple Sea Urchin. One of 1 sample exhibited significant toxic effect to Ampelisca.
Spatial Representation:	Samples were collected from one site in Newport Bay-Rhine Channel.
Temporal Representation:	One sample was collected in September 1994 and June 1996.
Data Quality Assessment:	Study was conducted by the California Department of Fish and Game.
QA/QC Equivalent:	QA/QC information is contained in the document.

Numeric Line of Evidence	Toxicity
Beneficial Use:	ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Eleven of 15 samples exhibited significant toxicity to Amphipods. In fact, one sample from station RC 5 had marginal toxicity and 10 samples collected from RC6 to RC15 had high toxicity (Bay and Greenstein, 2003).
Spatial Representation:	Samples were collected from 15 stations in Rhine Channel, Newport Bay. These stations were distributed throughout the study area.
Temporal Representation:	Samples were collected on May 14, 2002.
Data Quality Assessment:	SCCWRP QAPP was used.

Numeric Line of Evidence	Toxicity
Beneficial Use:	ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Ten of 15 samples exhibited significant toxicity effect to sea urchin development test in the sediment-water interface from stations RC2, RC3, RC4, RC7, RC8, RC9, RC11, RC12, RC13, and RC 14. In fact, all samples exhibited high toxicity (BPTCP, 1998).
Spatial Representation:	Samples were collected from stations RC1 - RC15 in Rhine Channel, Newport Bay.
Temporal Representation:	Samples were collected on May 14, 2002.
Data Quality Assessment:	SCCWRP QAPP was used.

Numeric Line of Evidence	Toxicity
Beneficial Use:	ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Toxicity Results: One of 1 sediment sample was significantly toxic to amphipods. None of 1 pore water sample collected exhibited significant effect in Sea Urchin fertilization. None of 1 pore water sample collected exhibited significant effect on Mysid growth. One of 1 sediment-water interface sample was significantly toxic to Sea Urchin fertilization (Bay et al. 2004).
Spatial Representation:	The samples were taken at station NB3.
Temporal Representation:	The samples were collected in May 2001.
Data Quality Assessment:	SCCWRP QAPP.

Region 8

Water Segment: Rhine Channel

Pollutant: Mercury

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant 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. Fifteen of 15 samples exceeded the sediment quality guideline. Sediment toxicity was documented in this water body and the pollutant could cause or contribute to the toxic effect. These samples exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	The concentration of toxic substance in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Evaluation Guideline:	The sediment quality guideline for mercury is 2.1 µg/g (ppm) (PTI Environmental Services, 1991).
Data Used to Assess Water	Fifteen of 15 samples exceeded the sediment quality guideline. Samples

Quality:	were collected from station RC1 - RC15 (Bay and Greenstein, 2003).
Spatial Representation:	Samples were collected from 15 stations in Rhine Channel, Newport Bay. These stations were distributed throughout the study area.
Temporal Representation:	Samples were collected on May 14, 2002.
Data Quality Assessment:	SCCWRP QAPP was used.

Numeric Line of Evidence	Toxicity
Beneficial Use:	ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: Toxic substances. The concentration of toxic substances in the water column, sediments, biota shall not adversely affect beneficial uses.
Data Used to Assess Water Quality:	Toxicity Results (Bay and Greenstein, 2003). Two of 2 sediment samples were significantly toxic to amphipods. Two of 2 pore water samples collected exhibited significant effect in Purple Urchin larval development. One of 1 sediment-water interface samples was significantly toxic to Purple Sea Urchin. One of 1 sample exhibited significant toxic effect to Ampelisca.
Spatial Representation:	Samples were collected from one site in Newport Bay-Rhine Channel.
Temporal Representation:	One sample was collected in September 1994 and June 1996.
Data Quality Assessment:	Study was conducted by the California Department of Fish and Game.
QA/QC Equivalent:	QA/QC information is contained in the document .

Numeric Line of Evidence	Toxicity
Beneficial Use:	ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Eleven of 15 samples exhibited significant toxicity to Amphipods. In fact, one sample from station RC 5 had marginal toxicity and 10 samples collected from RC6 to RC15 had high toxicity (Bay and Greenstein, 2003).
Spatial Representation:	Samples were collected from 15 stations in Rhine Channel, Newport Bay. These stations were distributed throughout the study area.
Temporal Representation:	Samples were collected on May 14, 2002.
Data Quality Assessment:	SCCWRP QAPP was used.

Numeric Line of Evidence	Toxicity
Beneficial Use:	ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Ten of 15 samples exhibited significant toxicity effect to sea urchin development test in the sediment-water interface from stations RC2, RC3, RC4, RC7, RC8, RC9, RC11, RC12, RC13, and RC 14. In fact, all samples exhibited high toxicity (BPTCP, 1998).
Spatial Representation:	Samples were collected from stations RC1 - RC15 in Rhine Channel, Newport Bay.
Temporal Representation:	Samples were collected on May 14, 2002.
Data Quality Assessment:	SCCWRP QAPP was used.

Numeric Line of Evidence	Toxicity
Beneficial Use:	ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Toxicity Results: One of 1 sediment sample was significantly toxic to amphipods. None of 1 pore water sample collected exhibited significant effect in Sea Urchin fertilization. None of 1 pore water sample collected exhibited significant effect on Mysid growth. One of 1 sediment-water interface sample was significantly toxic to Sea Urchin fertilization (Bay et al. 2004).
Spatial Representation:	The samples were taken at station NB3.
Temporal Representation:	The samples were collected in May 2001.
Data Quality Assessment:	SCCWRP QAPP.

Region 8

Water Segment: Rhine Channel

Pollutant: Sediment Toxicity

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

Multiple lines of evidence are available in the administrative record to assess this pollutant. A sufficient number of the sediment and water samples exhibit toxicity.

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of 15 water samples exhibit toxicity, and 19 of 25 sediment samples exhibit toxicity and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Narrative Water Quality Objective: Toxic substances. The concentration of toxic substances in the water column, sediments, biota shall not adversely affect beneficial uses.

Data Used to Assess Water Quality: Toxicity Results (Bay and Greenstein, 2003). Two of 2 sediment samples were significantly toxic to amphipods. Two of 2 pore water samples

	collected exhibited significant effect in Purple Urchin larval development. One of 1 sediment-water interface samples was significantly toxic to Purple Sea Urchin. One of 1 sample exhibited significant toxic effect to Ampelisca.
Spatial Representation:	Samples were collected from one site in Newport Bay-Rhine Channel.
Temporal Representation:	One sample was collected in September 1994 and June 1996.
Data Quality Assessment:	Study was conducted by the California Department of Fish and Game.
QA/QC Equivalent:	QA/QC information is contained in the document.

Numeric Line of Evidence	Toxicity
Beneficial Use:	ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Eleven of 15 samples exhibited significant toxicity to Amphipods. In fact, one sample from station RC 5 had marginal toxicity and 10 samples collected from RC6 to RC15 had high toxicity (Bay and Greenstein, 2003).
Spatial Representation:	Samples were collected from 15 stations in Rhine Channel, Newport Bay. These stations were distributed throughout the study area.
Temporal Representation:	Samples were collected on May 14, 2002.
Data Quality Assessment:	SCCWRP QAPP was used.

Numeric Line of Evidence	Toxicity
Beneficial Use:	ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Ten of 15 samples exhibited significant toxicity effect to sea urchin development test in the sediment-water interface from stations RC2, RC3, RC4, RC7, RC8, RC9, RC11, RC12, RC13, and RC 14. In fact, all samples exhibited high toxicity (BPTCP, 1998).
Spatial Representation:	Samples were collected from stations RC1 - RC15 in Rhine Channel, Newport Bay.
Temporal Representation:	Samples were collected on May 14, 2002.
Data Quality Assessment:	SCCWRP QAPP was used.

Numeric Line of Evidence	Toxicity
Beneficial Use:	ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Narrative Water Quality Objective: The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water Quality:	Toxicity Results: One of 1 sediment sample was significantly toxic to amphipods. None of 1 pore water sample collected exhibited significant effect in Sea Urchin fertilization. None of 1 pore water sample collected exhibited significant effect on Mysid growth. One of 1 sediment-water interface sample was significantly toxic to Sea Urchin fertilization (Bay et al. 2004).
Spatial Representation:	The samples were taken at station NB3.
Temporal Representation:	The samples were collected in May 2001.
Data Quality Assessment:	SCCWRP QAPP.

Region 8

Water Segment: Rhine Channel

Pollutant: Zinc

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list under sections 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Sediment samples exhibited toxicity and a large number of samples exceeded the water or sediment guidelines.

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 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 24 sediment samples taken exceed the sediment guideline, and 2 of 7 water samples were in exceedance of the CTR guidelines, and 14 of 30 sediment samples exhibited toxicity and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: ES - Estuarine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: Basin Plan Narrative Water Quality Objective: The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.

Data Used to Assess Water Quality: Seven of 15 sediment samples were toxic (<50%) to sea urchins during development, and 7 of 15 sediment samples exhibited less than 50% survival to amphipods. Note that TIEs were not successful in accurately

	identifying the toxicant(s) (Bay and Brown, 2003a).
Spatial Representation:	Samples were taken in the Rhine Channel.
Temporal Representation:	Samples were taken during 2003.
Data Quality Assessment:	SCCWRP QAPP.

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	ES - Estuarine Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Evaluation Guideline:	The sediment quality guideline for marine and estuarine sediments for zinc is 410 µg/g dry weight.
Data Used to Assess Water Quality:	One sample taken in May 2001 and one sample taken in November 2001 at station NB3 did not exceed the guideline. One sample taken in March 2002 at station NB3 did not exceed the guideline. One sample taken in September 2000 at station NB3 did not exceed the guideline (Bay et al. 2004). Three of 20 sediment samples exceeded the objective (Bay and Brown, 2003a).
Spatial Representation:	The samples were all taken at station NB3. The 20 samples were collected in the Rhine Channel.
Temporal Representation:	Samples were taken in May and November 2001, March 2002, and September 2000. The 20 samples were collected during 2003.
Data Quality Assessment:	SCCWRP QAPP.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	ES - Estuarine Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Evaluation Guideline:	The CTR guidelines for zinc in saltwater are acute = 90ppb and chronic 81 ppb.
Data Used to Assess Water Quality:	One total sample taken in March 2002 did not exceed either guideline. One total sample taken in November 2001 did not exceed either guideline (Bay et al. 2004).
Spatial Representation:	Samples were taken in March 2002 and November 2001.
Temporal Representation:	Samples were taken at station NB3.
Data Quality Assessment:	SCCWRP QAPP.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	ES - Estuarine Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Evaluation Guideline:	The CTR guidelines for zinc in saltwater are acute = 90 ppb and chronic 81 ppb.
Data Used to Assess Water Quality:	One dissolved water sample taken in March 2002 did not exceed either guideline. One dissolved water sample taken in November 2001 did not exceed either guideline. One sediment water interface dissolved sample did not exceed either guideline (Bay et al. 2004).
Spatial Representation:	Samples were taken in March 2002 and November 2001.
Temporal Representation:	Samples were taken at station NB3.
Data Quality Assessment:	SCCWRP QAPP.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	ES - Estuarine Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	The concentration of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Evaluation Guideline:	CTR for zinc in saltwater acute = 81 µg/L.
Data Used to Assess Water Quality:	Two out of 2 samples exceeded the CTR (Phillips et al. 1998).
Spatial Representation:	Rhine Channel.

Region 8

Water Segment:	San Diego Creek Reach 1
Pollutant:	Selenium
Decision:	List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. A large number of samples exceed the California Toxic Rule (CTR) criteria. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of 4 samples exceeded the CTR chronic saltwater criteria and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Lines of Evidence:

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	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 CTR, the freshwater chronic standard for selenium is 5 µg/L (ppb) (USEPA, 2000). The concentration of toxic substance in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).
Data Used to Assess Water	Four of 4 samples exceeded the CTR criteria. Two samples were

Quality:	collected 3-4 hrs apart per sample event. Therefore, the results of the two samples were averaged per sample event (Bay and Greenstein, 2003).
Spatial Representation:	Samples were collected from Campus Drive Bridge at San Diego Creek, Reach 1.
Temporal Representation:	Samples were collected on March 7, May 2, August 12 and November 8, 2002.
Environmental Conditions:	Two averaged samples were collected during wet weather (March 7 and November 8, 2002) and two averaged samples were collected in dry weather (May 2 and August 12, 2002).
Data Quality Assessment:	SCCWRP QAPP was used.

Region 8

Water Segment: San Diego Creek Reach 1

Pollutant: Toxaphene

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A sufficient number of samples exceed the NAS Guideline for the protection of aquatic life from bioaccumulation of toxic substances. Under section 3.5 of the Listing Policy any water body segment where tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline shall be placed on the section 303(d) list.

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of 13 tissue samples exceeded the NAS guideline for Toxaphene and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA), WA - Warm Freshwater Habitat

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Santa Ana River Basin RWQCB Basin Plan: Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels which are harmful to human health.

Evaluation Guideline:	100 ng/g or 100 ppb ww [NAS Guideline (whole fish)] (NAS, 1972).
Data Used to Assess Water Quality:	Red shiner whole tissue samples were taken in San Diego Creek Reach 1 from 1995-2003. During that time, fish tissue toxaphene concentrations exceeded the NAS guideline in 4 out of 13 tissue samples (TSMP, 2002).
Spatial Representation:	Sampling occurred in San Diego Creek Reach 1.
Temporal Representation:	Samples were collected from 1995-2003.
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.

Santa Ana Region (8)

LIST AS BEING ADDRESSED

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

Region 8

Water Segment:	Canyon Lake (Railroad Canyon Reservoir)
Pollutant:	Nutrients
Decision:	List in Being Addressed Category
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
SWRCB Staff Recommendation:	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	WA - Warm Freshwater Habitat, WI - Wildlife Habitat
Data Used to Assess Water Quality:	The Lake Elsinore Watershed Nutrient TMDL was approved by the RWQCB in 2004. Per the RWQCB, the TMDL was approved by USEPA in September 2005.

Region 8

Water Segment:	Chino Creek Reach 1
Pollutant:	Pathogens
Decision:	List in Being Addressed Category
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
SWRCB Staff Recommendation:	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	MI - Fish Migration
Data Used to Assess Water Quality:	A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Prado Area Streams Pathogen TMDL was approved by the RWQCB in 2005 and subsequently approved by USEPA.

Region 8

Water Segment:	Chino Creek Reach 2
Pollutant:	Coliform Bacteria
Decision:	List in Being Addressed Category
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
SWRCB Staff Recommendation:	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	MU - Municipal & Domestic
Data Used to Assess Water Quality:	A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Prado Area Streams Pathogen TMDL was approved by RWQCB on 2005 and subsequently approved by USEPA.

Region 8

Water Segment:	Cucamonga Creek, Valley Reach
Pollutant:	Coliform Bacteria
Decision:	List in Being Addressed Category
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
SWRCB Staff Recommendation:	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	MU - Municipal & Domestic
Data Used to Assess Water Quality:	The Prado Area Streams Pathogen TMDL was approved by the RWQCB in 2005 and subsequently approved by USEPA.

Region 8

Water Segment:	Elsinore, Lake
Pollutant:	Nutrients
Decision:	List in Being Addressed Category
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
SWRCB Staff Recommendation:	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.
Lines of Evidence:	

Line of Evidence	Remedial Program in Place
Beneficial Use	CM - Commercial and Sport Fishing (CA), WA - Warm Freshwater Habitat
Data Used to Assess Water Quality:	The Lake Elsinore Nutrients TMDL was approved by the RWQCB on 12-20-04 and subsequently approved by USEPA on 9-30-05.

Region 8

Water Segment:	Elsinore, Lake
Pollutant:	Organic Enrichment/Low Dissolved Oxygen
Decision:	List in Being Addressed Category
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
SWRCB Staff Recommendation:	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	CM - Commercial and Sport Fishing (CA), WA - Warm Freshwater Habitat
Data Used to Assess Water Quality:	The Lake Elsinore Nutrients TMDL was approved by the RWQCB on 12-20-04 and subsequently approved by USEPA on 9-30-05.

Region 8

Water Segment:	Knickerbocker Creek
Pollutant:	Pathogens
Decision:	List in Being Addressed Category
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a MS4 permit and order 13267 are addressing pathogen exceedances. This was done in November 2005. These are expected to result in attainment of the standard. A TMDL and implementation plan have been approved and are 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 remedial program other than a TMDL has been approved and is expected to result in attainment of the standard.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	CO - Cold Freshwater Habitat, WI - Wildlife Habitat
Data Used to Assess Water Quality:	Order number 13267 and MS4 permit are addressing pathogen exceedances in Knickerbocker Creek. Per the Regional Board, this was done in November 2005. Also, the Knickerbocker Creek Bacteria TMDL was approved by the RWQCB in 2005.

Region 8

Water Segment:	Mill Creek (Prado Area)
Pollutant:	Pathogens
Decision:	List in Being Addressed Category
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
SWRCB Staff Recommendation:	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	MU - Municipal & Domestic
Data Used to Assess Water Quality:	The Prado Area Streams Pathogen TMDL was approved by the RWQCB in 2005 and subsequently approved by USEPA.

Region 8

Water Segment:	Newport Bay, Lower
Pollutant:	Nutrients
Decision:	List in Being Addressed Category
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
SWRCB Staff Recommendation:	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	MA - Marine Habitat
Information Used to Assess Water Quality:	TMDL completed in 1999 (SWRCB, 2003).

Region 8

Water Segment:	Newport Bay, Lower
Pollutant:	Pathogens
Decision:	List in Being Addressed Category
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
SWRCB Staff Recommendation:	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	R1 - Water Contact Recreation
Information Used to Assess Water Quality:	TMDL completed in 2000 (SWRCB, 2003).
Non-Numeric Objective:	The concentration of toxic substance in the water column, sediments or biota shall not adversely affect beneficial uses.

Region 8

Water Segment:	Newport Bay, Lower
Pollutant:	Pesticides
Decision:	List in Being Addressed Category
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
SWRCB Staff Recommendation:	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	MA - Marine Habitat
Data Used to Assess Water Quality:	The Newport Bay Watershed Diazinon and Chlorpyrifos TMDL was approved by the RWQCB in 2003 and by USEPA in 2004.

Region 8

Water Segment:	Newport Bay, Upper (Ecological Reserve)
Pollutant:	Nutrients
Decision:	List in Being Addressed Category
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
SWRCB Staff Recommendation:	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	BI - Preserva.of Bio.Hab.of Spec.Signif., ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Information Used to Assess Water Quality:	TMDL completed in 1999 (SWRCB, 2003).

Region 8

Water Segment:	Newport Bay, Upper (Ecological Reserve)
Pollutant:	Pathogens
Decision:	List in Being Addressed Category
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
SWRCB Staff Recommendation:	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	R1 - Water Contact Recreation
Information Used to Assess Water Quality:	TMDL completed in 2000 (SWRCB, 2003).

Region 8

Water Segment:	Newport Bay, Upper (Ecological Reserve)
Pollutant:	Pesticides
Decision:	List in Being Addressed Category
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
SWRCB Staff Recommendation:	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	ES - Estuarine 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.
Non-Numeric Objective:	The concentration of toxic substance in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).

Region 8

Water Segment:	Newport Bay, Upper (Ecological Reserve)
Pollutant:	Sedimentation/Siltation
Decision:	List in Being Addressed Category
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
SWRCB Staff Recommendation:	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	BI - Preserva.of Bio.Hab.of Spec.Signif., ES - Estuarine Habitat, MA - Marine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat
Information Used to Assess Water Quality:	TMDL completed in 1999.

Region 8

Water Segment:	Prado Park Lake
Pollutant:	Pathogens
Decision:	List in Being Addressed Category
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d)
SWRCB Staff Recommendation:	After review of the available information for this recommendation, SWRCB staff conclude that the water body pollutant combination should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	R1 - Water Contact Recreation
Data Used to Assess Water Quality:	A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Prado Area Streams Pathogen TMDL was approved by RWQCB on 2005 and subsequently approved by USEPA.

Region 8

Water Segment:	San Diego Creek Reach 1
Pollutant:	Nutrients
Decision:	List in Being Addressed Category
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
SWRCB Staff Recommendation:	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	WA - Warm Freshwater Habitat
Information Used to Assess Water Quality:	TMDL completed in 1999 (SWRCB, 2003).

Region 8

Water Segment:	San Diego Creek Reach 1
Pollutant:	Pesticides
Decision:	List in Being Addressed Category
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
SWRCB Staff Recommendation:	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	WA - Warm Freshwater Habitat
Information Used to Assess Water Quality:	A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Newport Bay Watershed Diazinon/Chlorpyrifos TMDL was approved by RWQCB on April 4, 2003 and subsequently approved by USEPA on February 13, 2004.

Region 8

Water Segment:	San Diego Creek Reach 1
Pollutant:	Sedimentation/Siltation
Decision:	List in Being Addressed Category
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
SWRCB Staff Recommendation:	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	WA - Warm Freshwater Habitat
Information Used to Assess Water Quality:	TMDL completed in 1999.

Region 8

Water Segment:	San Diego Creek Reach 2
Pollutant:	Nutrients
Decision:	List in Being Addressed Category
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
SWRCB Staff Recommendation:	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	WA - Warm Freshwater Habitat
Information Used to Assess Water Quality:	TMDL completed in 1999 (SWRCB, 2003).
Non-Numeric Objective:	The concentration of toxic substance in the water column, sediments or biota shall not adversely affect beneficial uses (SARWQCB, 1995).

Region 8

Water Segment:	San Diego Creek Reach 2
Pollutant:	Sedimentation/Siltation
Decision:	List in Being Addressed Category
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
SWRCB Staff Recommendation:	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	WA - Warm Freshwater Habitat
Information Used to Assess Water Quality:	TMDL completed in 1999 (SWRCB, 2003).

Region 8

Water Segment:	San Diego Creek Reach 2
Pollutant:	Unknown Toxicity
Decision:	List in Being Addressed Category
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
SWRCB Staff Recommendation:	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	WA - Warm Freshwater Habitat
Information Used to Assess Water Quality:	A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Newport Bay Watershed Diazinon/Chlorpyrifos TMDL was approved by RWQCB on April 4, 2003 and subsequently approved by USEPA on February 13, 2004.

Region 8

Water Segment:	Santa Ana River, Reach 3
Pollutant:	Pathogens
Decision:	List in Being Addressed Category
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list
SWRCB Staff Recommendation:	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA)
Data Used to Assess Water Quality:	The Prado Area Streams Pathogen TMDL was approved by the RWQCB in 2005 and subsequently approved by USEPA.

Santa Ana Region (8)

DELIST

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

Region 8

Water Segment: Anaheim Bay

Pollutant: Copper

Decision: Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list under section 4.6 of the Listing Policy. Under section 4.6 two lines of evidence are necessary to assess listing status. One line of evidence documents toxicity and the other line of evidence associates the observed toxicity with a pollutant or pollutants

Two lines of evidence are available in the administrative record to assess this pollutant. Toxicity is observed but none of the samples exceeded the water quality guideline so it does not appear that this pollutant is causing the toxicity.

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 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 61 samples exceeded the sediment quality guidelines (dry weight) for copper, and this does not 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 be removed from the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.

Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: MA - Marine Habitat

Matrix: Sediment

Water Quality Objective/ Water Quality Criterion: The concentration of toxic substance in the water column, sediments or biota shall not adversely affect beneficial uses.

Evaluation Guideline: Sediment Quality Guidelines (dry weight) were used for the following metals: PELs (MacDonald et al, 1996) -112.2 µg/g lead, 4.21 µg/g

	cadmium, 1.77 µg/g silver; ERMs (Long et al., 1995) - 25 µg/g antimony, 370 µg/g chromium (total), 270 µg/g copper, 410 µg/g zinc; and 1.77 µg/g silver.
Data Used to Assess Water Quality:	None of the 63 samples exceeded the sediment quality guidelines for antimony, arsenic, cadmium, total chromium, copper, mercury, lead, mercury, silver, and zinc. Concentrations of the metals in sediment (dry weight) met standards (Santa Ana RWQCB, 2003b).
Spatial Representation:	Samples were collected at stations 1 through 35 in Anaheim Bay.
Temporal Representation:	Samples were collected on 08/25/2001 and 04/14/2003.
Data Quality Assessment:	SARWQCB followed the Bight 1998 QAPP developed by SCCWRP.
QA/QC Equivalent:	Quality control data was presented.

Numeric Line of Evidence	Toxicity
Beneficial Use:	MA - Marine Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	Basin Plan Narrative Water Quality Objective: The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.
Data Used to Assess Water Quality:	Nineteen of 59 samples exceeded the 90 percent of the minimum significant difference for test species Eohaustorius estuarius. Two of 29 samples exhibited toxicity in the dry season (8/25/01), and 17 of 30 exhibited toxicity in the wet season (4/14/03) (Santa Ana RWQCB, 2003a).
Spatial Representation:	The data shows data collected at 33 stations (no data were included for stations 22 and 26.)
Temporal Representation:	Data were collected on 8/25/01 and 4/14/2003.
Environmental Conditions:	Samples were collected during dry (8/25/01) and wet (4/14/03) seasons.
Data Quality Assessment:	SARWQCB followed the Bight 1998 QAPP developed by SCCWRP.
QA/QC Equivalent:	Quality control data was presented.

Region 8

Water Segment:	Huntington Harbour
Pollutant:	Dieldrin
Decision:	Delist
Weight of Evidence:	This pollutant is being considered for removal from the section 303(d) list under section 4.6 and 4.11 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. None of the sediment samples exceeds the sediment quality guidelines. There is sediment toxicity documented in this water body, however, it does not appear to be linked to this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy. 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 4. None of 60 samples exceeded the sediment guideline and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy. 5. There is no fish tissue data in the administrative record for Huntington Harbour. Based on section 4.11 of the Listing Policy, this is sufficient to delist this water body-pollutant combination from the 303(d) list. 6. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.
Lines of Evidence:	

Numeric Line of Evidence	Toxicity
Beneficial Use:	MA - Marine Habitat, SP - Fish Spawning
Matrix:	Sediment
Water Quality Objective/	Narrative Water Quality Objective: "The concentration of toxic pollutants

Water Quality Criterion:	in the water column, sediment or biota shall not adversely affect beneficial use."
Data Used to Assess Water Quality:	Forty-seven of 60 samples exceeded the 90 percent of the minimum significant difference for test species Eohaustorius estuarius. Twenty of 30 samples exhibited toxicity in the dry season (8/7/01 and 8/8/01), and 27 of 30 exhibited toxicity in the wet season (2/24/03) (Phillips et al., 1998).
Spatial Representation:	Samples were collected at 32 stations (no data were included for stations 40, 45, 48, 61, and 67).
Temporal Representation:	Samples were collected on 8/7/01, 8/8/01 and 2/24/03.
Environmental Conditions:	Samples were collected during dry (8/7/01, 8/8/01) and wet season (2/24/03).
Data Quality Assessment:	SARQWCB followed the Bight 1998 QAPP developed by SCCWRP.

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	MA - Marine Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	The concentration of toxic substance in the water column, sediments or biota shall not adversely affect beneficial uses (Santa Ana RWQCB, 1995a).
Evaluation Guideline:	The ERM for dieldrin is 8 µg/kg (ppb) (Long et al., 1990).
Data Used to Assess Water Quality:	None of 60 samples exceeded the ERM for dieldrin (Santa Ana RWQCB, 2003b).
Spatial Representation:	Samples were collected at stations 36 though 72 in Huntington Harbor.
Temporal Representation:	Samples were collected on 08/08/2001 and on 02/27/2003.
Environmental Conditions:	Samples were collected during the dry season (August) and wet season (February).
Data Quality Assessment:	SARWQCB followed the Bight 1998 QAPP developed by SCCWRP.
QA/QC Equivalent:	Quality control data was presented.

Region 8

Water Segment:	Newport Bay, Lower
Pollutant:	Metals
Decision:	Delist
Weight of Evidence:	This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. 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. Currently, Newport Bay, lower, is listed for metals. It is not possible, in a general listing, to determine which specific pollutant is causing or contributing to a water quality impacts. There is sufficient justification for removing the general listings for metals from the 303(d) list and replace these general listings with the specific pollutants when found to be exceeding.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because it is not possible, in a general listing, to determine which specific pollutant is causing or contributing to a water quality impacts.
Lines of Evidence:	

Line of Evidence	Narrative Description Data
Beneficial Use	MA - Marine Habitat
Data Used to Assess Water Quality:	Currently, Newport Bay, lower, is listed for metals. It is not possible, in a general listing, to determine which specific pollutant is causing or contributing to a water quality impacts. There is sufficient justification for removing the general listings for metals from the 303(d) list and replace these general listings with the specific pollutants when found to be exceeding.

Region 8

Water Segment:	Newport Bay, Lower
Pollutant:	Priority Organics
Decision:	Delist
Weight of Evidence:	This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. 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. Currently, Newport Bay, lower, is listed for priority organics. It is not possible, in a general listing, to determine which specific pollutant is causing or contributing to a water quality impacts. There is sufficient justification for removing the general listings for organics from the 303(d) list and replace these general listings with the specific pollutants when found to be exceeding.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because it is not possible, in a general listing, to determine which specific pollutant is causing or contributing to a water quality impacts.
Lines of Evidence:	

Line of Evidence	Narrative Description Data
Beneficial Use	MA - Marine Habitat
Data Used to Assess Water Quality:	Currently, Newport Bay, lower, is listed for priority organics. It is not possible, in a general listing, to determine which specific pollutant is causing or contributing to a water quality impacts. There is sufficient justification for removing the general listings for organics from the 303(d) list and replace these general listings with the specific pollutants when found to be exceeding.

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Santa Ana Region (8)

Original Fact Sheets

Fact Sheets Not Changed
from September 2005 Version

Santa Ana Region (8)

LIST

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

Region 8

Water Segment: Big Bear Lake

Pollutant: Polychlorinated biphenyls

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant.

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 12 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence	Pollutant-Tissue
Beneficial Use:	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA)
Matrix:	Tissue
Water Quality Objective/ Water Quality Criterion:	Santa Ana River Basin RWQCB Basin Plan: Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels which are harmful to human health.
Evaluation Guideline:	20 ng/g (OEHHA Screening Value).
Data Used to Assess Water Quality:	Four out of 12 samples exceeded. A total of 9 filet composite samples of largemouth bass and 3 filet composite samples of carp were collected. Largemouth bass were collected in 1994-95 and 2000-01. Carp were collected in 2000-01. The guideline was exceeded in all three carp samples and one largemouth bass sample collected in 2000. Seven smaller size largemouth bass samples had undeletable levels of PCBs (TSMP, 2002).

Spatial Representation:	Three stations were sampled: at Metcalf and Grout Bays, about 200 yards from the dam along the south shore, and in the vicinity of the mouth of Rathbone Creek.
Temporal Representation:	Samples were collected annually 1994-95 and 2000-01.
Data Quality Assessment:	Toxic Substances Monitoring Program 1994-95 Data Report. Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish and Game Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish and Game.

Region 8

Water Segment:	Elsinore, Lake
Pollutant:	Polychlorinated biphenyls
Decision:	List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 6 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Lines of Evidence:

Numeric Line of Evidence	Pollutant-Tissue
Beneficial Use:	CM - Commercial and Sport Fishing (CA)
Matrix:	Tissue
Water Quality Objective/ Water Quality Criterion:	Santa Ana River Basin RWQCB Basin Plan: Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels which are harmful to human health.
Evaluation Guideline:	20 ng/g (OEHHA Screening Value).
Data Used to Assess Water Quality:	Five out of 6 samples exceeded. A total of 6 filet composite samples of carp were collected. Carp were collected in 1994-95 and 2000-2002. The guideline was exceeded in every sample except in 1994 (TSMP, 2002).
Spatial Representation:	One station located west of Interstate 15.

Temporal Representation:	Samples were collected annually 1994-95 and 2000-02
Data Quality Assessment:	Toxic Substances Monitoring Program 1994-95 Data Report.
	Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 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.

Region 8

Water Segment:	Huntington Beach State Park
Pollutant:	Polychlorinated biphenyls
Decision:	List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 6 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Lines of Evidence:

Numeric Line of Evidence	Pollutant-Tissue
Beneficial Use:	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat
Matrix:	Tissue
Water Quality Objective/ Water Quality Criterion:	Santa Ana River Basin RWQCB Basin Plan: Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels which are harmful to human health.
Evaluation Guideline:	20 ng/g (OEHHA Screening Value).
Data Used to Assess Water Quality:	Four out of 6 samples exceeded. All 6 samples were filet composites representing the following species: barred surfperch, black surfperch, kelp bass, opaleye, shiner surfperch, and yellowfin croaker. Black surfperch and kelp bass from Emma Oil Platform, shiner surfperch from Huntington Beach and yellowfin croaker from Huntington Beach Pier exceeded guideline (TSMP, 2002).

Spatial Representation:	Three stations were sampled: Huntington Beach, Huntington Beach Pier, and Emma Oil Platform.
Temporal Representation:	Samples were collected in March and October 1999.
Data Quality Assessment:	CFCP 1998 Year 1 QA Summary: Pesticides and PCBs. California Department of Fish and Game. CDFG Fish and Wildlife Water Pollution Control Laboratory Data Quality Assurance Report. 1999 Coastal Fish Contamination Program (CFCP Year 2). California Department of Fish and Game.

Region 8

Water Segment:	Rhine Channel
Pollutant:	Polychlorinated biphenyls
Decision:	List
Weight of Evidence:	Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 2 samples exceeded the water quality objectives and this exceeds the allowable frequency of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded.
Lines of Evidence:	

Numeric Line of Evidence	Pollutant-Tissue
Beneficial Use:	CM - Commercial and Sport Fishing (CA)
Matrix:	Tissue
Water Quality Objective/ Water Quality Criterion:	Santa Ana River Basin RWQCB Basin Plan: Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels which are harmful to human health.
Evaluation Guideline:	20 ng/g (OEHHA Screening Value)
Data Used to Assess Water Quality:	Two out of 2 samples exceeded. Filet composite samples of chub mackerel and yellowfin croaker were collected. Chub mackerel were collected in 1997 and yellowfin croaker were collected in 1999. The guideline was exceeded in both samples (TSMP, 2002).
Spatial Representation:	One station located in the Rhine Channel by the Cannery Restaurant at the upper end of the channel.
Temporal Representation:	Samples were collected 7/11/97 and 8/10/99.
Data Quality Assessment:	Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game

Region 8

Water Segment:	Seal Beach
Pollutant:	Polychlorinated biphenyls
Decision:	List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 5 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Lines of Evidence:

Numeric Line of Evidence	Pollutant-Tissue
Beneficial Use:	CM - Commercial and Sport Fishing (CA)
Matrix:	Tissue
Water Quality Objective/ Water Quality Criterion:	Santa Ana River Basin RWQCB Basin Plan: Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels which are harmful to human health.
Evaluation Guideline:	20 ng/g (OEHHA Screening Value).
Data Used to Assess Water Quality:	Five out of 5 samples exceeded. Three white croaker and two yellowfin croaker samples were collected. All samples were filet composites. All samples exceeded guideline (TSMP, 2002).

Spatial Representation:	One station at Seal Beach was sampled.
Temporal Representation:	Samples were collected in May and October 1999.
Data Quality Assessment:	CFCP 1998 Year 1 QA Summary: Pesticides and PCBs. California Department of Fish and Game. CDFG Fish and Wildlife Water Pollution Control Laboratory Data Quality Assurance Report. 1999 Coastal Fish Contamination Program (CFCP Year 2). California Department of Fish and Game.

Santa Ana Region (8)

DELIST

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

Region 8

Water Segment:	Elsinore, Lake
Pollutant:	Sedimentation/Siltation
Decision:	Delist
Weight of Evidence:	This pollutant is being considered for removal from the section 303(d) list under section 4 of the Listing Policy. The Policy calls for the delisting of waters if the decision is found to be faulty and it is demonstrated that the listing would not have occurred in the absence of such faulty data. One testimonial line of evidence is available in the administrative record to assess this pollutant. The original listing was based on the assumption that nutrient impacts were associated with increases of sediment rates but recent nutrient TMDL implementation have shown that all nutrients are in the dissolved form and thus not associated with sediment inputs Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this listing from the water quality limited segment list for this water body pollutant combination. This conclusion is based on the findings that the original listing assumption cannot be made and therefore listing is faulty. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.

Lines of Evidence:

Line of Evidence	Testimonial Evidence
Beneficial Use	WA - Warm Freshwater Habitat
Non-Numeric Objective:	Inland surface waters shall not contain suspended or settleable solids in amounts which causes a nuisance or adversely affect beneficial uses.
Data Used to Assess Water Quality:	Lake Elsinore was originally placed in the 303(d) list by the Regional Board for sedimentation and siltation because it was believed that since the lake is impacted by nutrients the impact were associated with increases of sediment rates to the lake. However, during recent lake nutrient TMDL implementation it was found that the all the nutrients were in the dissolved form and are thus not associated with sediments. Increased sediment rates have been documented in a recent study (3.6 mm/yr from 18th and 19th century and 12.7 mm/yr in the 20th century) but there is no evidence to support that beneficial uses are impacted as a result of this increase. The Regional Board staff believes that the original listing was faulty and the water body pollutant combination should be removed from the 303(d) list.