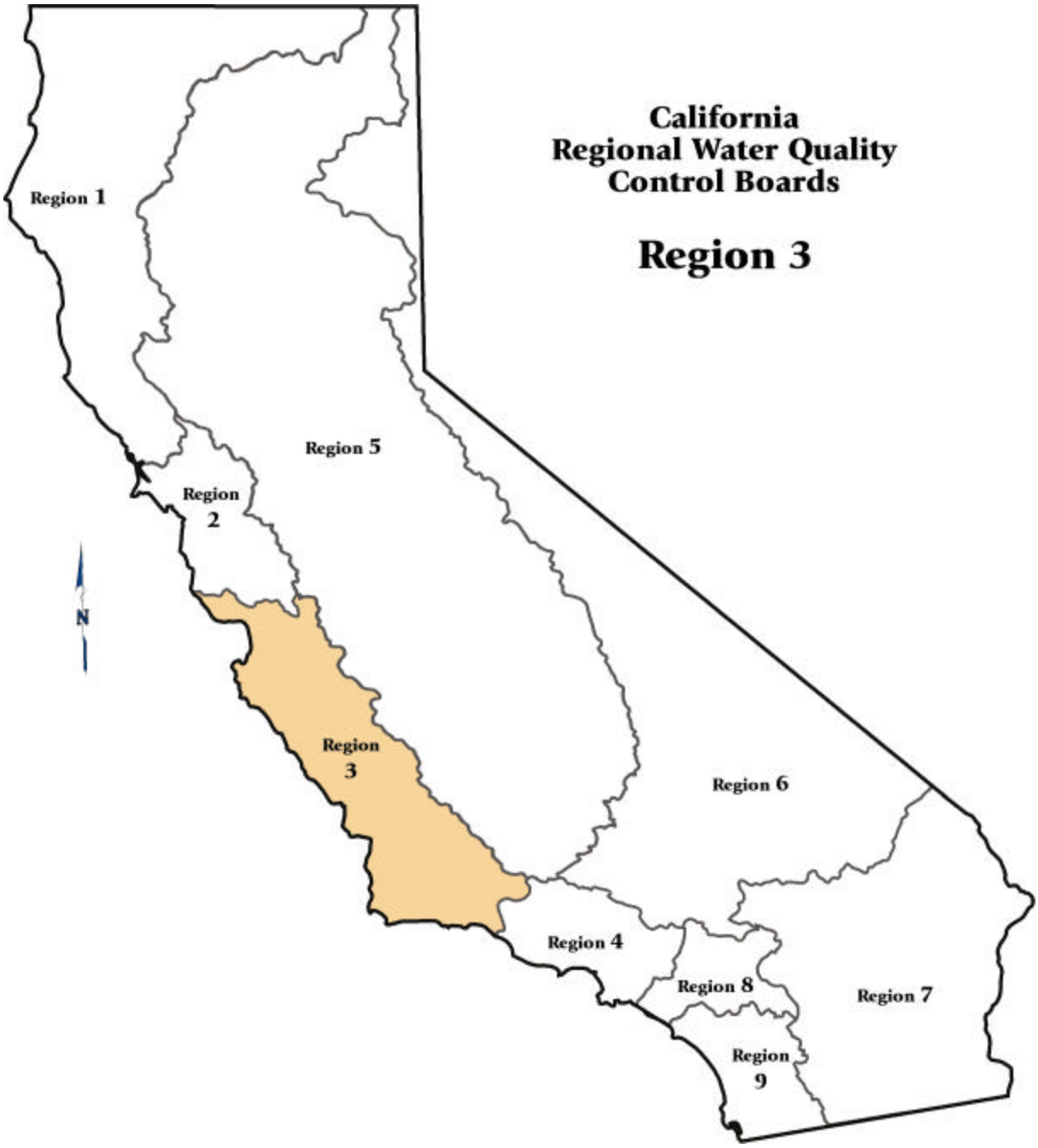
Fact Sheets Supporting
Revision of the Section 303(d) List



September 2005

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Central Coast Region (3)

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

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Region 3

Water Segment: Arroyo Paredon

Pollutant: Boron

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of 16 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those

	chemicals listed in Table 3-4 (Region 3 Basin Plan, Section II.A.2 Objectives for all inland surface waters, enclosed bay, and estuaries, page III-5). In Table 3-4 of the Basin Plan (page III-9), the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Data Used to Assess Water Quality:	Nine out of 16 samples exceeded the water quality objective for agricultural water use/ irrigation supply for boron (SWAMP, 2004; CCAMP, 2004).
Spatial Representation:	Samples were collected from one site.
Temporal Representation:	Samples were collected from January 2001 through March 2002.
Environmental Conditions:	The water body is located in the South Coast hydrologic unit, South Coast hydrologic area, and Carpinteria hydrologic subarea. The site location is Arroyo Paredon Creek at Via Real (315APC).
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

Water Segment: Arroyo Paredon

Pollutant: Nitrate as Nitrate (NO3)

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fourteen of 16 samples exceeded the MCL and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter

Water Quality Criterion:	15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as NO3) in Domestic or Municipal Supply is 45 mg/L.
Data Used to Assess Water Quality:	Fourteen out of 16 samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (SWAMP, 2004; CCAMP, 2004).
Spatial Representation:	Samples were collected from one site.
Temporal Representation:	Samples were collected from January 2001 through March 2002.
Environmental Conditions:	The water body is located in the South Coast hydrologic unit, South Coast hydrologic area, and Carpinteria hydrologic subarea. The site location is Arroyo Paredon Creek at Via Real (315APC).
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

Water Segment: Arroyo Paredon

Pollutant: Toxicity

Decision: List

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

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

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

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

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

Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: RA - Rare & Endangered Species, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Basin Plan: All waters shall be maintained free of toxic substances in

Water Quality Criterion:	concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective shall be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality conditions, shall not be less than that for the same water body in areas unaffected by the waste discharge or, when necessary, for other control water . . . .
Data Used to Assess Water Quality:	Two out of two samples displayed significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria met). Both toxic samples were tested using the 7-day Ceriodaphnia dubia test (SWAMP, 2004). Please note QA qualifier under Data Quality Assessment section below.
Spatial Representation:	Both samples were collected from the same station, (Arroyo Paredon) Paredon Creek at Via Real.
Temporal Representation:	Samples were collected December 3, 2001 and March 19, 2002. Toxicity in the survival endpoint was detected in both these samples.
Environmental Conditions:	Arroyo Paredon is in the South Coast Hydrologic Unit.
Data Quality Assessment:	SWAMP; QA qualifier indicated for the sample collected March 19, 2002 reported "minor deviations in water quality parameters".

Region 3

Water Segment: Bell Creek (Santa Barbara Co)

Pollutant: Nitrate as Nitrate (NO3)

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifteen of 17 samples exceeded the MCL and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CM - Commercial and Sport Fishing (CA), MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter

Water Quality Criterion:	15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3). In Table 3-2, the MCL for Nitrate (as NO3) in Domestic or Municipal Supply is 45 mg/L.
Data Used to Assess Water Quality:	Fifteen out of 17 samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (SWAMP, 2004).
Spatial Representation:	Samples were collected from one site.
Temporal Representation:	Samples were collected from January 2001 through March 2002.
Environmental Conditions:	The water body is located in the South Coast hydrologic unit, Arguello hydrologic area, Arguello hydrologic subarea. The monitoring site is located at Bell Creek on Bacara Resort Access Road (315BEL).
Data Quality Assessment:	SWAMP QAPP.

Region 3

Water Segment: Bradley Canyon Creek

Pollutant: Ammonia (Unionized) - Toxin

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 7 samples exceeded the criterion for unionized ammonia and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

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

Matrix: Water

Water Quality Objective/ The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan,

Water Quality Criterion:	Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4).
Data Used to Assess Water Quality:	Three out of seven samples exceeded the general water quality objective (CCAMP, 2004; SWAMP, 2004).
Spatial Representation:	Data were collected at site 312BCF on Bradley Canyon Creek, in Santa Barbara County.
Temporal Representation:	Samples were collected from April 2000 to December 2000.
Environmental Conditions:	Water body is located in the Santa Maria Hydrologic Unit. The site is identified as Bradley Canyon Diversion Channel at Foxen Canyon Road (312BCF).
Data Quality Assessment:	CCAMP, SWAMP QAPP.
QA/QC Equivalent:	Samples were taken according to CCAMP protocols.

Region 3

Water Segment: Bradley Canyon Creek

Pollutant: Nitrate as Nitrate (NO3)

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of 9 samples exceeded the MCL water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter

Water Quality Criterion:	15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as NO3) in Domestic or Municipal Supply is 45 mg/L).
Data Used to Assess Water Quality:	Four out of nine samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004; SWAMP, 2004).
Spatial Representation:	Samples were collected from 2 sites. All samples with exceedances were collected from one site (312BCF).
Temporal Representation:	Samples were collected from March 2000 to December 2000.
Environmental Conditions:	The water body is located in the Santa Maria hydrologic unit, Guadalupe hydrologic subarea. The site is located at Bradley Canyon Diversion Channel (312BCF) and Bradley Canyon Creek at Orcut-Garey Road (312BCG).
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

Water Segment: Bradley Channel

Pollutant: Nitrate as Nitrate (NO3)

Decision: List

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

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

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

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

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter

Water Quality Criterion:	15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as NO3) in Domestic or Municipal Supply is 45 mg/L).
Data Used to Assess Water Quality:	Three out of 15 samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004; SWAMP, 2004).
Spatial Representation:	Samples were collected from one site.
Temporal Representation:	Samples were collected from January 2000 to February 2001.
Environmental Conditions:	The water body is located in the Santa Maria hydrologic unit, Guadalupe hydrologic subarea. The site is located at Bradley Channel upstream of ponds (312BCU).
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

Water Segment: Canada De La Gaviota

Pollutant: Boron

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifteen of 32 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used

Water Quality Criterion:	for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Region 3 Basin Plan, Section II.A.2 Objectives for all inland surface waters, enclosed bay, and estuaries, page III-5). In Table 3-4 of the Basin Plan (page III-9), the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Data Used to Assess Water Quality:	Fifteen out of 32 samples exceeded the water quality objective for agricultural water use/ irrigation supply for boron (CCAMP, 2004; SWAMP, 2004).
Spatial Representation:	Samples were collected from two sites. Exceedances were detected in samples collected from both sites.
Temporal Representation:	Samples were collected from January 2001 to July 2002.
Environmental Conditions:	The water body is located in the South Coast hydrologic unit, Arguello hydrologic area, Arguello hydrologic subarea. The monitoring sites are located at Canada de la Gaviota at State Park Entrance (315GAV) and Canada de la Gaviota at Highway 1 (315GAI).
Data Quality Assessment:	CCAMP and SWAMP QAPP.

Region 3

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

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	WA - Warm Freshwater Habitat
Information Used to Assess Water Quality:	A TMDL was approved by USEPA on January 14, 2003. The RWQCB is tracking the implementation of the TMDL through the Nitrate Management Plan being implemented by Santa Cruz County.

Region 3

Water Segment: Carneros Creek

Pollutant: Ammonia (Unionized) - Toxin

Decision: List

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

One line of evidence is available in the administrative record to assess this pollutant. Three samples exceeded the water quality objective.

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 9 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, MI - Fish Migration, RA - Rare & Endangered Species, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:	The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4)
Data Used to Assess Water Quality:	Three out of 9 samples exceeded the general water quality objective (CCAMP, 2004; SWAMP, 2004).
Spatial Representation:	Samples were collected from one site.
Temporal Representation:	Samples were collected from March 1999 to March 2000.
Environmental Conditions:	Water body is located in the Bolsa Nueva hydrologic unit. The site is Carneros Creek in Los Lomas at Blohm Road (306CAR).
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

Water Segment:	Casmalia Canyon Creek
Pollutant:	Sedimentation/Siltation
Decision:	List
Weight of Evidence:	The data and information in the administrative record supports this change in the original listing recommendation. There was a misunderstanding of the applicable water body recommended for listing by staff. This change will correct that mistake. The correction is requested for San Antonio Creek (South Coast Watershed) Sedimentation/Siltation. This water body was incorrectly assigned to a sedimentation/siltation problem. The correct water bodies are Shuman Canyon Creek and Casmalia Canyon Creek. The 303(d) List Table should be revised to remove San Antonio Creek (South Coast Watershed) for Sedimentation/Siltation and add Casmalia Canyon Creek (4.5 miles) and Shuman Canyon Creek (3.0 miles) (313004) for Sedimentation/Siltation. The original listing recommendation originated with Regional Board staff, however there was a misunderstanding of the applicable water body recommended for listing by staff. This change will correct that mistake.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that a water body was incorrectly assigned to a sedimentation/siltation problem and that the listing should be revised with this water body and the listing should be changed as presented.
Lines of Evidence:	

Line of Evidence	Pollutant-Water
Beneficial Use	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI - Wildlife Habitat
Information Used to Assess Water Quality:	
Data Used to Assess Water Quality:	The correction is requested for San Antonio Creek (South Coast Watershed) Sedimentation/Siltation. This water body was incorrectly assigned to a sedimentation/siltation problem. The correct water bodies are Shuman Canyon Creek and Casmalia Canyon Creek.

	The 303(d) List Table should be revised to remove San Antonio Creek (South Coast Watershed) for Sedimentation/Siltation and add Casmalia Canyon Creek (4.5 miles) and Shuman Canyon Creek (3.0 miles) (313004) for Sedimentation/Siltation. The original listing recommendation originated with Regional Board staff, however there was a misunderstanding of the applicable water body recommended for listing by staff. This change will correct that mistake.
Spatial Representation:	The sampling site was 4.5 miles.
Temporal Representation:	Correction Submittal on 6/14/2004.

Region 3

Water Segment: Chorro Creek

Pollutant: Oxygen, Dissolved

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of 10 samples exceeded the COLD dissolved oxygen water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Adverse Biological Responses

Beneficial Use: AG - Agricultural Supply, BI - Preserva.of Bio.Hab.of Spec.Signif., CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	COLD dissolved oxygen water quality objective of 7.0 mg/l.
Data Used to Assess Water Quality:	Regional Board staff is proposing that Chorro Creek (downstream of Chorro Creek Road) be listed as impaired for dissolved oxygen. The impairment is evidenced by depressed levels of dissolved oxygen measured during pre-dawn and 24-hour sampling periods. Continuous depressed levels of dissolved oxygen (< 7.0 mg/l) were found in Chorro Creek at TWB (approximately between 12a.m-8a.m.) during three 24-hour hourly sampling periods in July, August and September, 2003. Continuous depressed levels of oxygen were also found between 5 p.m. and 7 a.m. at site added in September, 2003 upstream of TWB (usTWB), (CCRWQCB, 2004o). Dissolved oxygen levels were within the COLD water quality objective at CAN during three 24-hour hourly sampling periods in July, August and September, 2003 (CCAMP, 2004). Dissolved oxygen levels just under the COLD water quality objective (6.81-6.99 mg/l) were found during one of three sampling periods at an upstream site (CHO) in August, 2003. Regional Board staff does not consider the segment upstream of CAN (and CHO) as impaired. Regional Board staff considers the segment between usTWB and TWB (downstream of Chorro Creek Road) as impaired for dissolved oxygen. The level of impairment between CAN and usTWB is unknown.
Spatial Representation:	Chorro Creek (Calwater watershed no. 31022012) downstream of Chorro Creek Road. Measurements were taken in Chorro Creek at four locations (CHO, CAN, usTWB, and TWB).
Temporal Representation:	Hourly measurements were taken in three 24-hour hourly sampling periods in July, August, and September, 2003.
Environmental Conditions:	Hourly dissolved oxygen measurements were taken using a recording dissolved oxygen meter.
Data Quality Assessment:	Dissolved oxygen measurements in Chorro Creek were taken according to CCAMP 24-hour hourly recording meter sampling protocols. Morro Bay Volunteer Monitoring Program.

Region 3

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

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	WA - Warm Freshwater Habitat
Information Used to Assess Water Quality:	A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Sediment TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by USEPA on January 20, 2004.

Region 3

Water Segment: Cuyama River

Pollutant: Boron

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 35 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used

Water Quality Criterion:	for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Region 3 Basin Plan, Section II.A.2 Objectives for all inland surface waters, enclosed bay, and estuaries, page III-5). In Table 3-4 of the Basin Plan (page III-9), the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Data Used to Assess Water Quality:	Six out of 35 samples exceeded the water quality objective for agricultural water use/ irrigation supply for boron (CCAMP, 2004; SWAMP, 2004).
Spatial Representation:	Samples were collected from four sites. Exceedances were detected from samples collected at one station (312CCC).
Temporal Representation:	Samples were collected from January 2000 to April 2001.
Environmental Conditions:	The water body is located in the Santa Maria hydrologic unit, Cuyama Valley hydrologic area, Cuyama Valley hydrologic subarea. The monitoring sites are located at Cuyama River at Highway 33 (312CAV), Cuyama River above Lockwood turnoff (312CUL), Cuyama River downstream Buckhorn Road (312CUY), and Cuyama River downstream Cottonwood Canyon (312CCC).
Data Quality Assessment:	CCAMP, SWAMP QAPP

Region 3

Water Segment: Franklin Creek

Pollutant: Nitrate as Nitrate (NO3)

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-six of 28 samples exceeded the MCL and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter

Water Quality Criterion:	15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as NO3) in Domestic or Municipal Supply is 45 mg/L).
Data Used to Assess Water Quality:	Twenty-six out of 28 samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004, SWAMP, 2004).
Spatial Representation:	Samples collected from one site.
Temporal Representation:	Samples were collected from January 2001 to March 2003.
Environmental Conditions:	Water body is located in the South Coast hydrologic unit, Carpinteria hydrologic subarea. The site location is Franklin Creek at Carpinteria Ave (315FRC).
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

Water Segment: Gabilan Creek

Pollutant: Nitrate as Nitrate (NO3)

Decision: List

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

One line of evidence is available in the administrative record to assess this pollutant. Two measurements exceeded the water quality objective.

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 6 samples exceeded the MCL and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter

Water Quality Criterion:	15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as NO3) in Domestic or Municipal Supply is 45 mg/L.)
Data Used to Assess Water Quality:	There were 6 total samples taken by CCAMP staff. Out of the 6 samples, 2 exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004, SWAMP, 2004).
Spatial Representation:	Samples were collected from two sites.
Temporal Representation:	Samples were collected from July 1999 to February 2000.
Environmental Conditions:	The water body is located in the Salinas hydrologic unit, Gabilan Range hydrologic subarea. The sites are Gabilan Creek at Independence Road and East Boranda Road (309GAB), City of Salinas Urban GC1-M.
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

Water Segment: Glen Annie Canyon

Pollutant: Nitrate as Nitrate (NO3)

Decision: List

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

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

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

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

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter

Water Quality Criterion:	15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as NO3) in Domestic or Municipal Supply is 45 mg/L).
Data Used to Assess Water Quality:	Twelve out of 15 samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004; SWAMP, 2004).
Spatial Representation:	Samples collected from one site.
Temporal Representation:	Samples were collected from February 2001 to March 2002.
Environmental Conditions:	The water body is located in the South Coast hydrologic area, Goleta hydrologic subarea. The site is located at Glenn Annie upstream Hollister Road (Site I.D. #315ANN).
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

Water Segment: Llagas Creek

Pollutant: Nitrate as Nitrate (NO3)

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty-three of 69 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter

Water Quality Criterion:	15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as NO3) in Domestic or Municipal Supply is 45 mg/L).
Data Used to Assess Water Quality:	Thirty-three out of 69 samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004; SWAMP, 2004).
Spatial Representation:	Samples were collected from six sites. Exceedances were detected in samples collected from three of the six sites.
Temporal Representation:	Samples were collected from December 1997 to January 1999.
Environmental Conditions:	This water body was listed for nutrients in 2002 but not for nitrate specifically. The water body is located in the Pajaro River hydrologic unit, South Santa Clara Valley hydrologic area, South Santa Clara Valley hydrologic subarea. The sites are located at Llagas Creek at Holsclaw and Leavesley Roads (305HOL), Llagas Creek at Bloomfield Avenue (305LLA), Llagas Creek at Luchessa Avenue/Southside Drive (305LUC), Llagas Creek at Monterey Road (305MON) Llagas Creek at Oak Glen Avenue (305OAK), Llagas Creek at Buena Vista Avenue (305VIS).
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

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

Line of Evidence	Remedial Program in Place
Beneficial Use	MU - Municipal & Domestic, WA - Warm Freshwater Habitat
Information Used to Assess Water Quality:	A TMDL was approved by USEPA on January 14, 2003. The RWQCB is tracking the implementation of the TMDL through the Nitrate Management Plan being implemented by Santa Cruz County.

Region 3

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

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	R1 - Water Contact Recreation, R2 - Non-Contact Recreation
Information Used to Assess Water Quality:	A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Pathogens TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by USEPA on January 20, 2004.

Region 3

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

Line of Evidence	Remedial Program in Place
Beneficial Use	WA - Warm Freshwater Habitat
Information Used to Assess Water Quality:	A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Sediment TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by USEPA on January 20, 2004.

Region 3

Water Segment: Main Street Canal

Pollutant: Ammonia (Unionized) - Toxin

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of 11 samples exceeded the unionized ammonia numeric water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

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

Matrix: Water

Water Quality Objective/ The discharge of wastes shall not cause concentrations of unionized ammonia

Water Quality Criterion:	(NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4)
Data Used to Assess Water Quality:	Ten out of 11 samples exceeded the general water quality objective (CCAMP, 2004; SWAMP, 2004).
Spatial Representation:	Data were collected at site 312MSD on Main Street Canal, in Santa Barbara County.
Temporal Representation:	Samples were collected from February 2000 to January 2001.
Environmental Conditions:	Water body is located on the Santa Maria hydrologic unit, Guadalupe hydrologic subarea. The site is called Main Street Canal upstream Ray Road at Hwy 166 (Site #312MSD). In 2000, this site was an open agriculture ditch downstream of the city stormwater drain. This year (2005) the channel is being reconstructed to flow underground through pipes to a location approximately 100 feet downstream of this monitoring site.
Data Quality Assessment:	CCAMP, SWAMP QAPP.
QA/QC Equivalent:	Samples were taken according to CCAMP protocols.

Region 3

Water Segment: Moro Cojo Slough

Pollutant: Ammonia (Unionized) - Toxin

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of 18 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, ES - Estuarine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:	The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4)
Data Used to Assess Water Quality:	Four out of 18 samples exceeded the general water quality objective (CCAMP, 2004; SWAMP, 2004).
Spatial Representation:	Samples were collected from two sites. All exceedances were detected in samples collected from one site (Site 306MOR). This site is tidally influenced and flow was observed moving into the slough out of the harbor (instead of flowing out to the harbor) on numerous occasions.
Temporal Representation:	Samples were collected from March 1999 to March 2000.
Environmental Conditions:	Water body is located in the Bolsa Nueva (Elkhorn Slough) Hydrologic Unit, Bolsa Nueva hydrologic subarea, Moro Cojo Slough planning watershed. The sites are located at Moro Cojo Slough at Moss Landing Harbor (306MCM) and Moro Cojo Slough at Highway 1 (306MOR). Note: in the Region 3 Basin Plan, Moro Cojo Slough is listed under the Salinas Hydrologic Unit (309). The Region 3 CCAMP/SWAMP Monitoring classifies this water body under the Bolsa Nueva hydrologic unit (306) to be in agreement with the CalWater designation.
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

Water Segment: Morro Bay

Pollutant: Arsenic

Decision: List

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

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.5 a sufficient number of samples exceed the USEPA and OEHHA 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 CTR, USEPA and OEHHA screening values 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 five water column samples exceeded the CTR Saltwater acute (CMC) and saltwater chronic (CCC) criteria, but two out of 12 tissue samples exceeded the USEPA and OEHHA screening values 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-Water

Beneficial Use: CM - Commercial and Sport Fishing (CA), MA - Marine Habitat

Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses. Material Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses.
Evaluation Guideline:	CTR Saltwater acute 69 ug/l Criterion Maximum Concentration (CMC) and saltwater chronic 36 ug/l Criterion Continuous Concentration (CCC) criteria are applicable for the protection of aquatic life.
Data Used to Assess Water Quality:	None of the five samples taken at the 5 stations exceeded any of the CTR dissolved arsenic criteria in the water column (Keeling, 2003).
Spatial Representation:	Water was sampled from five (5) separate locations representing the back, middle and front of the Bay including inflows from the mouth Chorro and the mouth Los Osos Creeks that feed the Bay. These stations were: Back Bay, Mouth Los Osos, Mouth Chorro, Middle Bay and Front Bay.
Temporal Representation:	Water was sampled on March 8, 2001.
Environmental Conditions:	This is one of five metals originally included in the 1996-303(d) metals listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of the Listing Policy.
Data Quality Assessment:	Battelle Laboratory Quality Assurance Plan.

Numeric Line of Evidence	Pollutant-Tissue
Beneficial Use:	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat
Matrix:	Tissue
Evaluation Guideline:	The USEPA criteria for inorganic arsenic is 1.2 ppm wet weight and the OEHHA criteria is 1.0 ppm wet weight for total arsenic.
Data Used to Assess Water Quality:	Evaluation of the tissue data using the USEPA and OEHHA criteria resulted in two of 12 samples exceeding. Sampling stations 429.0, outside of the mouth of the Bay recorded levels of 1.95 ppm and 3.43 ppm wet weight (Keeling, 2003).
Spatial Representation:	Four sites were sampled on Morro Bay. One station was used to list: 429.0. There were a total of 4 sampling stations: 427.0, 428.5, 429.0 and 429.2.
Temporal Representation:	Site 429.0 was sampled on 6/28/1982, 1/21/1983 and 5/3/1983. Sampling

	occurred from 5-30-1980 to 1-20-93.
Environmental Conditions:	This is one of five metals originally included in the 1996-303(d) metals listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of the Listing Policy.
Data Quality Assessment:	State Mussel Watch Program Quality Assurance Plan.

Region 3

Water Segment: Morro Bay

Pollutant: Oxygen, Dissolved

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two-hundred thirty- one of 283 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Adverse Biological Responses

Beneficial Use: CO - Cold Freshwater Habitat

Matrix: -N/A

Water Quality Objective/ MAR = Marine Habitat

Water Quality Criterion:

Evaluation Guideline:	COLD Dissolved Oxygen = 7.0 mg/L.
Data Used to Assess Water Quality:	Regional Board staff is proposing that Morro Bay be listed as impaired for dissolved oxygen. The impairment is evidenced by depressed levels of dissolved oxygen measured during pre-dawn and 24-hour sampling periods. Two Hundred and thirty one data points (of a total 283 data points) collected between 1997 and 2002 fell below the water quality objective of 7.0 mg/L (CCRWQCB, 2004o). Depressed oxygen levels were found at all sampling locations except for EEL.
Spatial Representation:	Morro Bay Estuary (Calwater watershed no. 31023012), San Luis Obispo County. Samples were collected at 8 locations throughout the bay: ATP, SPM, Lo2, PSP, EEL, Ch1, CSI, and SHI.
Temporal Representation:	Single measurements were taken in the Morro Bay estuary using a hand-held meter. Measurements were taken during pre-dawn conditions from 4/17/1997 through 12/132002.
Environmental Conditions:	Samples were primarily taken during pre-dawn conditions, when dissolved oxygen levels are expected to be lowest.
QA/QC Equivalent:	Samples were taken according to the Morro Bay Volunteer Monitoring Program protocols for pre-dawn sampling in the Morro Bay National Estuary Programs Quality Assurance Program Plan. The Morro Bay Volunteer Monitoring Program staff have monthly correspondence with volunteers regarding data review, meter operation, and safety. Volunteer monitors collect dissolved oxygen data according to the Morro Bay National Estuary Programs Quality Assurance Program Plan.

Region 3

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

Line of Evidence	Remedial Program in Place
Beneficial Use	R1 - Water Contact Recreation, R2 - Non-Contact Recreation
Information Used to Assess Water Quality:	A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Pathogens TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by USEPA on January 20, 2004.

Region 3

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

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	ES - Estuarine Habitat
Information Used to Assess Water Quality:	A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Sediment TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by USEPA on January 20, 2004.

Region 3

Water Segment: Natividad Creek

Pollutant: Nitrate as Nitrate (NO3)

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 5 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter

Water Quality Criterion:	15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3). In Table 3-2, the MCL for Nitrate (as NO3) in Domestic or Municipal Supply is 45 mg/L.
Data Used to Assess Water Quality:	Three out of five samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004).
Spatial Representation:	Samples were collected from one site.
Temporal Representation:	Samples were collected January 2000 to May 2000. This site is a City of Salinas Storm water permit monitoring site and therefore it is monitored during storm water events.
Environmental Conditions:	The water body is located in the Salinas hydrologic unit, Gabilan range hydrologic area, Gabilan range hydrologic subarea. NC1_M is identified as City of Salinas Urban NC1_M.
Data Quality Assessment:	City of Salinas MS4 Permit Monitoring. CCAMP data.

Region 3

Water Segment: Old Salinas River Estuary

Pollutant: Ammonia (Unionized) - Toxin

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 48 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

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

Matrix: Water

Water Quality Objective/ The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan,

Water Quality Criterion:	Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4)
Data Used to Assess Water Quality:	Six out of 48 samples exceeded the general water quality objective (SWAMP, 2004).
Spatial Representation:	Samples were collected from two sites. Exceedances were detected in water samples collected from one (site ID #309OLD) of the two sites.
Temporal Representation:	Samples were collected from March 1999 to March 2003.
Environmental Conditions:	The water body is located in the Salinas hydrologic unit. The sites are located at Old Salinas River at Monterey Dunes Way (309OLD) and Old Salinas River at Potrero Road (309POT).
Data Quality Assessment:	SWAMP QAPP.

Region 3

Water Segment: Orcutt Creek

Pollutant: Ammonia (Unionized) - Toxin

Decision: List

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

Two lines of evidence are available in the administrative record to assess this pollutant. A sufficient number of samples exceed the water quality objective.

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifteen of 59 total water samples exceeded the water quality objective of 0.025 mg/l and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WI - Wildlife Habitat

Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4).
Data Used to Assess Water Quality:	From new listing proposal: Regional Board staff is proposing that multiple water bodies (including Orcutt Solomon Creek) within the Santa Maria watershed be listed for unionized ammonia. The impairment is evidenced by levels of unionized ammonia greater than the general numeric water quality objective of 0.025 mg/l. The Regional Board assessed CCAMP data and results are as follows for two sites on Orcutt Solomon Creek: 3 of 11 and 5 of 12 data points exceed the criterion. See CCAMP data for further information (CCAMP, 2004). This constituent was not included in the last (2002) data evaluation because data had not been processed in time to meet the 2002 deadline.
Spatial Representation:	Data were collected at sites 312ORB and 312ORI on Orcutt Solomon Creek, in Santa Barbara County.
Temporal Representation:	Unknown - see CCAMP data.
QA/QC Equivalent:	Samples were taken according to CCAMP protocols.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WI - Wildlife Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4).
Data Used to Assess Water Quality:	Seven out of 36 samples exceeded the water quality objective (SWAMP, 2004).
Spatial Representation:	Samples were collected from three sites. Exceedances were detected in water samples collected from all sites.

Temporal Representation:	Samples were collected from January 2000 to April 2001.
Environmental Conditions:	The water body is located in the Santa Maria hydrologic unit, Guadalupe hydrologic subarea, Orcutt Creek planning watershed. Monitoring sites are located at Orcutt Solomon Creek at Black Road (#312ORB), Orcutt Solomon Creek upstream Santa Maria River (#312ORC) and Orcutt Solomon Creek at Highway 1 (312ORI).
Data Quality Assessment:	SWAMP QAPP.

Region 3

Water Segment: Orcutt Creek

Pollutant: Chlorpyrifos

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of 4 samples exceeded the Basin Plan general water quality objective; 2 of 2 samples were in exceedance of the aquatic life criteria and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WI - Wildlife Habitat

Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. CDFG Hazardous Assessment Criteria for Aquatic Life: 4-day average = 0.014 ppb, 1-hour day average = 0.025 ppb.
Data Used to Assess Water Quality:	Water was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) on four separate occasions (June 2002, September 2002, March 2003, and May 2003), (SWAMP, 2004). Water was toxic at both stations in September 2002 and May 2003 (4 exceedances of 4 measurements). Analysis of chlorpyrifos in water showed that on all occasions when water toxicity was observed, concentrations of chlorpyrifos exceeded the LC 50 for this pesticide for toxicity to Ceriodaphnia dubia. Toxicity Identification Evaluations of water samples from Orcutt Creek and the Santa Maria River showed toxicity to C. dubia was due to chlorpyrifos. At the station on Orcutt Creek, 2 of 2 samples were in exceedance of the aquatic life criteria.
Spatial Representation:	Samples were collected at one station on Orcutt Creek (a tributary to the Santa Maria River).
Temporal Representation:	Samples were collected on 9/3/2002 and 5/28/2003.
QA/QC Equivalent:	Quality assurance and quality control procedures were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WI - Wildlife Habitat
Matrix:	Sediment

Water Quality Objective/ Water Quality Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Data Used to Assess Water Quality:	Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) on two separate occasions (June 2002 and May 2003). Sediment was toxic at both stations in both samples (SWAMP, 2004). Analysis of chlorpyrifos in sediment porewater showed that on all occasions when water toxicity was observed, concentrations of chlorpyrifos exceeded the LC50 for this pesticide to the amphipod Hyalella azteca. Toxicity Identification Evaluations of sediment samples from Orcutt Creek and the Santa Maria River showed toxicity was due to a combination of chlorpyrifos and other pesticides, likely pyrethroid pesticides (refer to attached excel spreadsheet file). Sediment bulk-phase chemical analyses showed elevated concentrations of chlorpyrifos.
Spatial Representation:	Samples were collected at one station on Orcutt Creek (a tributary to the Santa Maria River).
Temporal Representation:	Samples were collected in 5/28/2003.
QA/QC Equivalent:	Quality assurance and quality control procedures for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Region 3

Water Segment: Orcutt Creek

Pollutant: DDT

Decision: List

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

Six lines of evidence are available in the administrative record to assess this pollutant. Three lines of evidence pertain to the pollutant in water and three pertain to the pollutant in sediment. A sufficient number of samples exceed the Human Health criteria for the different types of degradation products of DDT.

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

This conclusion is based on the staff findings that:
1. The water quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2.The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Samples were taken in 2002 and 2003. Two of 2 samples (2002 and 2003) exceeded the total DDT, 2 of 2 samples exceeded 4,4' DDD, and 2 of 2 samples exceeded the 4,4' DDE Human Health (water consumption) criteria and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Even though sediment toxicity was found in 2003 the measurements of these chemicals in the sediment did not exceed the sediment guideline.
5.Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use:	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WI - Wildlife Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. CTR criteria for: Freshwater acute = 1.1 ppb for 4,4'-DDT and DDTs (total). Human Health (water consumption) = 0.00059 ppb for 4,4'-DDT. Human Health (water consumption) = 0.0059 ppb for DDTs (total).
Data Used to Assess Water Quality:	Samples were collected on Orcutt Creek on two occasions: in 2002 and 2003 (SWAMP, 2004). Both measurements for total DDTs and 4,4'-DDT were below freshwater acute criteria, however both measurements exceeded human health criteria for water consumption for both 4,4'-DDT and DDTs (total).
Spatial Representation:	Samples were collected at one station on Orcutt Creek (a tributary to the Santa Maria River).
Temporal Representation:	Samples were collected on 9/3/2002 and 5/28/2003.
QA/QC Equivalent:	Quality assurance and quality control procedures were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WI - Wildlife Habitat
Matrix:	Sediment

Water Quality Objective/ Water Quality Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. Freshwater Sediment Criteria (Policy): DDT(sum) = 62.9 ppb DDTs(total) = 572
Data Used to Assess Water Quality:	Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) in 2002 and 2003 (SWAMP, 2004). In the Orcutt Creek sample, the sediment criterion for DDT (sum) was exceeded (62.9 ppb) in the 2003 sample, but not in 2002 sample. The DDTs (total) criterion (572 ppb) was not exceeded on either occasion.
Spatial Representation:	Samples were collected at one station on Orcutt Creek (a tributary to the Santa Maria River).
Temporal Representation:	Samples were collected on 6/28/2002 and 5/28/2003.
QA/QC Equivalent:	Quality assurance and quality control procedures for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WI - Wildlife Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other

	appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. CTR criteria for: Human Health (water consumption) = 0.00083 ppb for 4,4'-DDD.
Data Used to Assess Water Quality:	Samples were collected on Orcutt Creek on two occasions: in 2002 and 2003 (SWAMP, 2004). Both measurements for 4,4'-DDD exceeded the human health criteria for water consumption (0.00083 ppb).
Spatial Representation:	Samples were collected at one station on Orcutt Creek (a tributary to the Santa Maria River).
Temporal Representation:	Samples were collected on 9/3/2002 and 5/28/2003.
QA/QC Equivalent:	Quality assurance and quality control procedures were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. Freshwater Sediment Criteria (Policy): DDD(sum) = 28.0 ppb.
Data Used to Assess Water	Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River

Quality:	(SMA) in 2002 and 2003 (SWAMP, 2004). In the Orcutt Creek sample, the sediment criterion for DDD (sum) was not exceeded on either occasion.
Spatial Representation:	Samples were collected at one station on Orcutt Creek (a tributary to the Santa Maria River).
Temporal Representation:	Samples were collected on 6/28/2002 and 5/28/2003.
QA/QC Equivalent:	Quality assurance and quality control procedures for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WI - Wildlife Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. CTR criteria for: Human Health (water consumption) = 0.00059 ppb for 4,4'-DDE.
Data Used to Assess Water Quality:	Samples were collected on Orcutt Creek on two occasions: in 2002 and 2003 (SWAMP, 2004). Both measurements for 4,4'-DDE exceeded the human health criteria for water consumption (0.00059 ppb).
Spatial Representation:	Samples were collected at one station on Orcutt Creek (a tributary to the Santa Maria River).
Temporal Representation:	Samples were collected on 9/3/2002 and 5/28/2003.

QA/QC Equivalent:	Quality assurance and quality control procedures were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. Freshwater Sediment Criteria: DDE(sum) = 31.3 ppb
Data Used to Assess Water Quality:	Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) in 2002 and 2003 (SWAMP, 2004). In the Orcutt Creek sample, the sediment criterion for DDE (sum) was exceeded in 2003, but not in 2002.
Spatial Representation:	Samples were collected at one station on Orcutt Creek (a tributary to the Santa Maria River).
Temporal Representation:	Samples were collected on 6/28/2002 and 5/28/2003.
QA/QC Equivalent:	Quality assurance and quality control procedures for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Region 3

Water Segment: Orcutt Creek

Pollutant: Dieldrin

Decision: List

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

Two lines of evidence are available in the administrative record to assess this pollutant. A sufficient number of samples exceed the CTR Human Health criteria.

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 2 samples exceeded the CTR Human Heath criteria and this exceeds the allowable frequency listed in Table 3.1. Sediment samples were taken but dieldrin results were below the detection limits.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Sediment

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WI - Wildlife Habitat

Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. Freshwater Sediment criterion: max Dieldrin = 6.18 ppm.
Data Used to Assess Water Quality:	Sediment was sampled at Orcutt Creek (ORC) in May 2003 and the dieldrin level was below the detection limit (SWAMP, 2004).
Spatial Representation:	The sample was collected at one station on Orcutt Creek (a tributary to the Santa Maria River).
Temporal Representation:	One sample was collected on 5/28/2003.
QA/QC Equivalent:	Quality assurance and quality control procedures for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WI - Wildlife Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods.

	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. CTR Human Health Criterion for consumption of Water & Organisms = 0.00014 ppb.
Data Used to Assess Water Quality:	Samples were collected on Orcutt Creek in September 2002 and May 2003 (SWAMP, 2004). Two of 2 samples were in exceedance of the CTR Human Health criterion for water consumption.
Spatial Representation:	Samples were collected at one station on Orcutt Creek (a tributary to the Santa Maria River).
Temporal Representation:	Samples were collected on 9/3/2002 and 5/28/2003.
QA/QC Equivalent:	Quality assurance and quality control procedures were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Region 3

Water Segment: Oso Flaco Creek

Pollutant: Ammonia (Unionized) - Toxin

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of 12 samples exceeded the water quality objective of 0.025 mg/l and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, BI - Preserva.of Bio.Hab.of Spec.Signif., CM - Commercial and Sport Fishing (CA), FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4).
Data Used to Assess Water Quality:	Levels of unionized ammonia greater than the general numeric water quality objective of 0.025 mg/l (CCAMP, 2004; SWAMP, 2004). Nine of 12 data points exceed the water quality objective.
Spatial Representation:	Data were collected at site 312OFC on Oso Flaco Creek, in San Luis Obispo County.
Temporal Representation:	Samples were collected from February 2000 to January 2001.
Environmental Conditions:	Water body is located in the Santa Maria hydrologic unit, Guadalupe hydrologic subarea. Monitoring site is located at Oso Flaco Creek at Oso Flaco Lake Road (#312OFC).
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

Water Segment:	Oso Flaco Lake
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. Three out of 3 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
Lines of Evidence:	

Numeric Line of Evidence	Pollutant-Tissue
Beneficial Use:	CM - Commercial and Sport Fishing (CA)
Matrix:	Tissue
Water Quality Objective/ Water Quality Criterion:	Central Coast RWQCB Basin Plan: No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

Evaluation Guideline:	2 ng/g (OEHHA Screening Value).
Data Used to Assess Water Quality:	Three out of 3 samples exceeded (TSMP, 2002). A total of 2 filet composite samples of bluegill and one filet composite of hitch were collected. Bluegill were collected from 1993. Hitch were collected 2001. The guideline was exceeded in all samples.
Spatial Representation:	One station located in lake at foot of Oso Flaco Road.
Temporal Representation:	Samples were collected 1993 and 2001.
Data Quality Assessment:	Toxic Substances Monitoring Program 1992-93 Data Report. Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish and Game.

Region 3

Water Segment: Pajaro River

Pollutant: Boron

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of 16 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used

Water Quality Criterion:	for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Region 3 Basin Plan, Section II.A.2 Objectives for all inland surface waters, enclosed bay, and estuaries, page III-5). In Table 3-4 of the Basin Plan (page III-9), the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Data Used to Assess Water Quality:	Ten out of 16 samples exceeded the water quality objective for agricultural water use/ irrigation supply for boron (CCAMP, 2004; SWAMP, 2004).
Spatial Representation:	Samples were collected from one site.
Temporal Representation:	Samples were collected from January 2001 through March 2002.
Environmental Conditions:	The water body is located in Pajaro River Hydrologic Unit, Watsonville Hydrologic Subarea. The monitoring site is located on the Pajaro River at Thurwachter Bridge (305THU).
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

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

Line of Evidence	Remedial Program in Place
Beneficial Use	R1 - Water Contact Recreation, R2 - Non-Contact Recreation
Information Used to Assess Water Quality:	A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Pathogens TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by USEPA on January 20, 2004.

Region 3

Water Segment: Prefumo Creek

Pollutant: Nitrate as Nitrate (NO3)

Decision: List

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

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

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

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

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter

Water Quality Criterion:	15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as NO3) in Domestic or Municipal Supply is 45 mg/L).
Data Used to Assess Water Quality:	Fourteen out of 15 samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004, SWAMP, 2004).
Spatial Representation:	Samples were collected from one site.
Temporal Representation:	Samples were collected from January 2002 through March 2003.
Environmental Conditions:	Water body is located in the Estero Bay hydrologic unit, Point Buchon hydrologic area, San Luis Obispo Creek hydrologic subarea. Monitoring site is located at Prefumo Creek Calle Joaquin (310PRE).
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

Water Segment: Quail Creek

Pollutant: Nitrate as Nitrate (NO3)

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of 8 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter

Water Quality Criterion:	15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as NO3) in Domestic or Municipal Supply is 45 mg/L).
Data Used to Assess Water Quality:	Four out of eight samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004; SWAMP, 2004).
Spatial Representation:	Samples were collected from two sites. Exceedances were detected in samples collected at one site (309QUA).
Temporal Representation:	Samples were collected from February 1999 through February 2000.
Environmental Conditions:	The water body is located in the Salinas Bay hydrologic unit, Chualar hydrologic area, and Chualar hydrologic subarea. The monitoring sites area located at Quail Creek at Old Stage Road (309UQA) and Quail Creek at Potter Road (309QUA).
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

Water Segment: Rincon Creek

Pollutant: Boron

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of 21 samples exceeded the boron water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used

Water Quality Criterion:	for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Region 3 Basin Plan, Section II.A.2 Objectives for all inland surface waters, enclosed bay, and estuaries, page III-5). In Table 3-4 of the Basin Plan (page III-9), the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Data Used to Assess Water Quality:	Seven out of 21 samples exceeded the water quality objective for agricultural water use/ irrigation supply for boron (CCAMP, 2004; SWAMP, 2004).
Spatial Representation:	Samples were collected from one site.
Temporal Representation:	Samples were collected from January 2001 through July 2002.
Environmental Conditions:	The water body is located in the South Coast hydrologic unit, South Coast hydrologic area, Carpinteria hydrologic subarea. The monitoring site is located at Rincon Creek at Bates Road, upstream of Highway 101 (315RIN).
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

Water Segment: Rincon Creek

Pollutant: Toxicity

Decision: List

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

One line of evidence is available in the administrative record to assess this pollutant. Two measurements exhibit toxicity.

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 2 samples displayed significant toxicity in the survival endpoint using the 7-day Pimephales promelas test. This exceeded the narrative water quality objective and exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: CO - Cold Freshwater Habitat, MI - Fish Migration, RA - Rare & Endangered Species, SP - Fish Spawning, WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:	Basin Plan: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective shall be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality conditions, shall not be less than that for the same water body in areas unaffected by the waste discharge or, when necessary, for other control water . . . .
Data Used to Assess Water Quality:	Two out of two samples displayed significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5% and is less than the evaluation threshold (both criteria are met). Both samples were tested using the 7-day Pimephales promelas test (SWAMP, 2004). Please note QA qualifier under Data Quality Assessment section below.
Spatial Representation:	Both samples were collected from the same station, Rincon Creek at Bates Road.
Temporal Representation:	Samples were collected December 3, 2001 and March 19, 2002. Toxicity in the survival endpoint was detected in both these samples.
Environmental Conditions:	Rincon Creek is in the South Coast Hydrologic Unit.
Data Quality Assessment:	SWAMP; QA qualifier indicated for the sample collected March 19, 2002. This is reported as minor deviations in water quality parameters.

Region 3

Water Segment: Salinas Reclamation Canal

Pollutant: Ammonia (Unionized) - Toxin

Decision: List

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

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

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

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

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan,

Water Quality Criterion:	Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4)
Data Used to Assess Water Quality:	Five of 14 total samples collected by CCAMP staff exceeded the water quality objective (CCAMP, 2004; SWAMP, 2004).
Spatial Representation:	Samples were collected at site 309ALD by CCAMP staff. This water body is located in the Salinas hydrologic unit, Chualar hydrologic subarea. The site is located at Salinas Reclamation Canal at Boranda Road (309ALD).
Temporal Representation:	Samples were collected from February 1999 to February 2000.
Data Quality Assessment:	CCAMP, SWAMP QAPP used to evaluate.

Region 3

Water Segment: Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant: Nitrate as Nitrate (NO3)

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventeen of 47 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the

Water Quality Criterion:	limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as NO3) in Domestic or Municipal Supply is 45 mg/L).
Data Used to Assess Water Quality:	Seventeen out of 47 samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004; SWAMP, 2004).
Spatial Representation:	Samples were collected from two sites. Exceedances were detected in samples collected from both sites.
Temporal Representation:	Samples were collected from February 1999 through March 2003.
Environmental Conditions:	This water body is already listed for nutrients, but not for nitrate specifically. The water body is located in the Salinas hydrologic unit, and Lower Salinas Valley hydrologic area. The sampling sites are located at Salinas River at Davis Road (309DAV), and Salinas River at Highway 1 (309SBR).
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

Water Segment:	Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)
Pollutant:	Toxaphene
Decision:	List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. It is recommended that this new pollutant listing replace the current pesticides listing for this water body. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 2 samples exceeded the NAS Guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
Lines of Evidence:	

Numeric Line of Evidence	Pollutant-Tissue
Beneficial Use:	CM - Commercial and Sport Fishing (CA)
Matrix:	Tissue
Water Quality Objective/ Water Quality Criterion:	Central Coast RWQCB Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.

Evaluation Guideline:	100 ng/g - NAS Guideline (whole fish).
Data Used to Assess Water Quality:	Two out of 2 samples exceeded (TSMP, 2002). One whole fish composite sample of hitch and of sucker was collected. Hitch was collected in 1992 and suckers were collected in 1998. The guideline was exceeded in both samples.
Spatial Representation:	Two stations were sampled: about 1/2 mile downstream of the Blanco Drain discharge to the Salinas River and at the Davis Road crossing.
Temporal Representation:	Samples were collected in 1992 and 1998.
Data Quality Assessment:	Toxic Substances Monitoring Program 1992-93 Data Report. Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program,1996-2000. Department of Fish and Game.

Region 3

Water Segment: San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant: Ammonia as Nitrogen

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of 52 samples exceeded the ammonia water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, MI - Fish Migration, RA - Rare & Endangered Species, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:	The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4)
Data Used to Assess Water Quality:	Seven out of 52 samples exceeded the general water quality objective (CCAMP, 2004; SWAMP, 2004).
Spatial Representation:	Samples were collected from four sites. Exceedances were detected in samples collected from one (site #313SAI) of the four sites.
Temporal Representation:	Samples were collected from January 2001 to March 2003.
Environmental Conditions:	The water body is located in the San Antonio hydrologic unit, San Antonio hydrologic subarea. Monitoring sites are located at San Antonio Creek at Rancho de las Flores Bridge and Highway 135 (313SAB), San Antonio Creek at Railroad Bridge, upstream of lagoon (313SAC), San Antonio Creek at San Antonio Road East (313SAE), and San Antonio Creek at San Antonio Road West (313SAI).
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

Water Segment:	San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)
Pollutant:	Boron
Decision:	List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Most of the measurements exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-one of 45 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
Lines of Evidence:	

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	AG - Agricultural Supply
Matrix:	Water
Water Quality Objective/	Waters shall not contain concentrations of chemical constituents in amounts

Water Quality Criterion:	which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Region 3 Basin Plan, Section II.A.2 Objectives for all inland surface waters, enclosed bay, and estuaries, page III-5). In Table 3-4 of the Basin Plan (page III-9), the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Data Used to Assess Water Quality:	Thirty-one out of 45 samples exceeded the water quality objective for agricultural water use/ irrigation supply for boron (SWAMP, 2004; CCAMP, 2004).
Spatial Representation:	Samples were collected from four sites. Exceedances were detected in samples collected from three of the four sites (313SAB, 313SAC, 313SAI).
Temporal Representation:	Samples were collected from January 2001 through July 2002.
Environmental Conditions:	The water body is located in the San Antonio hydrologic unit, San Antonio hydrologic subarea. Monitoring sites are located at San Antonio Creek at Rancho de las Flores Bridge and Highway 135 (313SAB), San Antonio Creek at Railroad Bridge, upstream of lagoon (313SAC), San Antonio Creek at San Antonio Road East (313SAE), and San Antonio Creek at San Antonio Road West (313SAI).
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

Water Segment: San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant: Nitrogen, Nitrite

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of 52 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Drinking Water MCL for nitrite = 1 mg/L (Title 22 Table 64431-A Primary

Water Quality Criterion:	(inorganics) 64444A (organics)).
Data Used to Assess Water Quality:	Five out of 52 samples exceeded the general water quality objective (CCAMP, 2004; SWAMP, 2004).
Spatial Representation:	Samples were collected from four sites. Exceedances were detected in samples collected from one (site #313SAI) of the four sites.
Temporal Representation:	Samples were collected from January 2001 to March 2003.
Environmental Conditions:	The water body is located in the San Antonio hydrologic unit, San Antonio hydrologic subarea. Monitoring sites are located at San Antonio Creek at Rancho de las Flores Bridge and Highway 135 (313SAB), San Antonio Creek at Railroad Bridge, upstream of lagoon (313SAC), San Antonio Creek at San Antonio Road East (313SAE), and San Antonio Creek at San Antonio Road West (313SAI).
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

Water Segment: San Benito River

Pollutant: Fecal Coliform

Decision: List

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

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

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

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

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml,

Water Quality Criterion:	nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.
Data Used to Assess Water Quality:	Five of 12 samples exceeded the water quality objective (CCAMP, 2004).
Spatial Representation:	2 stations.
Temporal Representation:	Monthly sampling events. Samples taken from 12/1997 to 12/1998; 12 sampling dates).
Data Quality Assessment:	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.

Region 3

Water Segment:	San Bernardo Creek
Pollutant:	Fecal Coliform
Decision:	List
Weight of Evidence:	This pollutant is being considered for listing under section 2.2 and 3.2 of the Listing Policy. Under these sections of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
SWRCB Staff Recommendation:	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	R1 - Water Contact Recreation, R2 - Non-Contact Recreation
Information Used to Assess Water Quality:	A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Pathogens TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by USEPA on January 20, 2004.

Region 3

Water Segment: San Diego Creek

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 100 ng/g NAS Guideline for the protection of aquatic life from bioaccumulation of toxic substances. Under section 3.5 of the Listing Policy any water body segment where tissue pollutant levels in organisms exceed a pollutant specific evaluation guideline shall be placed on the section 303(d) list.

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

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

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

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

Matrix:	Tissue
Water Quality Objective/ 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)].
Data Used to Assess Water Quality:	Nine out of 25 samples exceeded (TSMP, 2002). A total of 25 whole fish composite samples were collected: 19 red shiner, 4 fathead minnow, and 2 California killifish. Red shiner were collected from 1992-2001. Fathead minnow were collected in 2001-02. California killifish were collected in 1993. The guideline was exceeded in red shiner from 1992 through 1997. Samples from 1998-2002 did not exceed the guideline.
Spatial Representation:	Three stations were sampled: in the riffle 150 yards upstream from the confluence of San Diego Creek and Peters Canyon Creek (Barranca Parkway), upstream of Michelson Drive, and in small ponds adjacent to the Upper Newport Bay Ecological Reserve.
Temporal Representation:	Samples were collected from 1992-2002.
Data Quality Assessment:	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 3

Water Segment: San Lorenzo Creek

Pollutant: Fecal Coliform

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 9 of 15 samples exceeded the Basin Plan water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: 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.

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

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

	exceed 400/100 ml.
Data Used to Assess Water Quality:	Nine of 15 samples exceeded the water quality objective (CCAMP, 2004).
Spatial Representation:	1 site.
Temporal Representation:	Monthly sampling events.
Data Quality Assessment:	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.

Region 3

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

Line of Evidence	Remedial Program in Place
Beneficial Use	WA - Warm Freshwater Habitat
Information Used to Assess Water Quality:	A TMDL was approved by USEPA on January 14, 2003. The RWQCB is tracking the implementation of the TMDL through the Nitrate Management Plan (adopted into the Basin Plan) being implemented by Santa Cruz County.

Region 3

Water Segment:	San Lorenzo River
Pollutant:	Sediment
Decision:	List
Weight of Evidence:	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.
SWRCB Staff Recommendation:	After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	AG - Agricultural Supply
Information Used to Assess Water Quality:	A TMDL for this water segment-pollutant combination was approved by the RWQCB in May 2003. USEPA approved the TMDL on February 19, 2004.

Region 3

Water Segment: San Luis Obispo Creek

Pollutant: Nitrate as Nitrate (NO3)

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty-five of 66 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter

Water Quality Criterion:	15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as NO3) in Domestic or Municipal Supply is 45 mg/L).
Data Used to Assess Water Quality:	Thirty-five out of 66 samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004; SWAMP, 2004).
Spatial Representation:	Samples were collected from four sites. Exceedances were detected in samples collected from two of the four sites (310SLB, 310SLV).
Temporal Representation:	Samples were collected from April 2001 through March 2003.
Environmental Conditions:	Water body is located in Estero Bay Hydrologic Unit, Point Buchon hydrologic area, San Luis Obispo Creek Hydrologic Subarea. The monitoring sites are located at San Luis Obispo Creek at San Luis Bay Drive (310SLB), San Luis Obispo Creek at Cuesta Park (310SLC), San Luis Obispo Creek at Mission Plaza (310SLM), San Luis Obispo Creek at Los Osos Valley Road (310SLV). The Basin Plan differentiates beneficial uses for this water body depending on whether it is above or below W. Marsh St. Two of the sites are located above W. Marsh St (310SLM and 310SLC) and two are located below W. Marsh St (310SLV and 310SLB). The sites with exceedances are located below W. Marsh St.
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

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

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	R1 - Water Contact Recreation, R2 - Non-Contact Recreation
Information Used to Assess Water Quality:	A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Pathogens TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by USEPA on January 20, 2004.

Region 3

Water Segment: San Vicente Creek

Pollutant: Turbidity

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list under sections 2.1, 3.6, 3.7 and 3.10 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status while under section 3.10, a minimum of two lines of evidence are needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.1 the site exceeds the drinking water standard.

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty two of 91 measurements were in exceedance of the Title 22 Secondary MCL criterion for turbidity, and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Water Quality Criterion:	Title 22 Secondary MCL = 5 Units
Data Used to Assess Water Quality:	The Davenport Sanitation District (DSD), which withdraws water from San Vicente Creek to serve the town of Davenport (adjacent to San Vicente Creek) has been unable to produce potable drinking water during periods of heavy rainfall due to high levels of turbidity. Turbidity levels at the influent were measured for 31 days in December 2001, 30 days in January 2002, and 30 days in December 2002 by the County of Santa Cruz Water and Wastewater Division at the Davenport Water influent. Twenty two of 91 measurements were in exceedance of the criterion (Frediani, J. 2004).
Spatial Representation:	Samples were collected in San Vicente Creek at the Davenport water treatment plant intake point.
Temporal Representation:	Samples were collected daily in December 2001, January 2002, and December 2002. Other data have been collected, but were available at time of data solicitation.
Environmental Conditions:	Records state that standards are exceeded "during periods of heavy rainfall". The watershed is primarily privately owned and is managed for timber production, open pit mining, cattle grazing, urbanization and water diversion.
QA/QC Equivalent:	State Board was unable to obtain any QA/QC information.

Region 3

Water Segment: Santa Maria River

Pollutant: Ammonia (Unionized) - Toxin

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of 59 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4)
Data Used to Assess Water Quality:	Levels of unionized ammonia greater than the general numeric water quality objective of 0.025 mg/l. Five of 59 samples exceeded the water quality objective (CCAMP, 2004, SWAMP, 2004).
Spatial Representation:	Samples were collected from three sites. Exceedances were detected in samples collected from two of the three sites.
Temporal Representation:	Samples were collected from February 2000 to March 2003.
Environmental Conditions:	Santa Maria River is located in the Santa Maria hydrologic unit, Guadalupe Hydrologic subarea. Sites are located at Santa Maria River at Bull Canyon Road (312SBC), Santa Maria River at Estuary (312SMA), and Santa Maria River at Highway 1 (312SMI).
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

Water Segment: Santa Maria River

Pollutant: Chlorpyrifos

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list under sections 2.1, 3.6, and 3.10 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status while under section 3.10, a minimum of two lines of evidence are needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.6 the site has significant sediment toxicity and the pollutant is likely to cause or contribute to the toxic effect. The benthic community is impacted and may be impacted by this pollutant.

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

This conclusion is based on the staff findings that:
1. The sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Two of 2 samples were in exceedance of the aquatic life criteria, 2 of 2 sediment bulk-phase chemical analyses showed elevated concentrations of chlorpyrifos, and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The benthic community in this water body is impacted and this pollutant is associated with this impact.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use:	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. CDFG Hazardous Assessment Criteria for Aquatic Life: 4-day average = 0.014 ppb, 1-hour day average = 0.025 ppb.
Data Used to Assess Water Quality:	Water was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) on two separate occasions (September 2002 and May 2003). Water was toxic at both stations in September 2002 and May 2003. Analysis of chlorpyrifos in water showed that on all occasions when water toxicity was observed, concentrations of chlorpyrifos exceeded the LC 50 for this pesticide for toxicity to Ceriodaphnia dubia (SWAMP, 2004). Toxicity Identification Evaluations of water samples from Orcutt Creek and the Santa Maria River showed toxicity to C. dubia was due to chlorpyrifos. At the station on the Santa Maria River, 2 of 2 samples were in exceedance of the aquatic life criteria.
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	Samples were collected on 9/3/2002 and 5/28/2003
QA/QC Equivalent:	Quality assurance and quality control procedures were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Numeric Line of Evidence	Pollutant-Sediment

Beneficial Use:	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Data Used to Assess Water Quality:	Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) in 2002 and 2003. Sediment was toxic at both stations in both samples. Analysis of chlorpyrifos in sediment porewater showed that on all occasions when water toxicity was observed, concentrations of chlorpyrifos exceeded the LC50 for this pesticide to the amphipod Hyalella azteca (SWAMP, 2004). Toxicity Identification Evaluations of sediment samples from Orcutt Creek and the Santa Maria River showed toxicity was due to a combination of chlorpyrifos and other pesticides, likely pyrethroid pesticides (refer to attached excel spreadsheet file). Sediment bulk-phase chemical analyses showed elevated concentrations of chlorpyrifos.
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	Samples were collected on 10/22/2003.
QA/QC Equivalent:	Quality assurance and quality control procedures for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Region 3

Water Segment: Santa Maria River

Pollutant: DDT

Decision: List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list under sections 2.1, 3.6, and 3.10 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status while under section 3.10, a minimum of two lines of evidence are needed to assess listing status.

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

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

This conclusion is based on the staff findings that:
1. The CTR criteria used complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Two of 2 total DDTs and 4,4'-DDT samples were below freshwater acute criteria, 1 of 2 measurements for 4,4'-DDD exceeded the human health criteria for water consumption, and 2 of 2 measurements for 4,4'-DDE exceeded the human health criteria for water consumption. These exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use:	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. CTR criteria for: Freshwater acute = 1.1 ppb for 4,4'-DDT and DDTs (total). Human Health (water consumption) = 0.00059 ppb for 4,4'-DDT. Human Health (water consumption) = 0.0059 ppb for DDTs (total).
Data Used to Assess Water Quality:	Samples were collected on Orcutt Creek on two occasions: in 2002 and 2003. Both measurements for total DDTs and 4,4'-DDT were below freshwater acute criteria, however both measurements exceeded human health criteria for water consumption for both 4,4'-DDT and DDTs (total), (SWAMP, 2004).
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	Samples were collected on 9/3/2002 and 5/28/2003.
QA/QC Equivalent:	Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife

	Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. Freshwater Sediment Criteria (Policy): DDT(sum) = 62.9 ppb DDTs(total) = 572
Data Used to Assess Water Quality:	Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) on two separate occasions (June 2002 and May 2003). Sediment was toxic at both stations in both samples (SWAMP, 2004). Sediment bulk-phase chemical analyses showed elevated concentrations of DDTs. In the Santa Maria River sample, the sediment criterion for DDT (sum) was exceeded (62.9 ppb) in 2002, but not in 2003. The DDTs (total) criterion (572 ppb) was not exceeded on either occasion.
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	Samples were collected on 6/28/2002 and 10/22/2003.
QA/QC Equivalent:	Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Numeric Line of Evidence	Pollutant-Tissue
Beneficial Use:	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix:	Tissue
Water Quality Objective/ Water Quality Criterion:	Central Coast RWQCB Basin Plan: No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Evaluation Guideline:	1000 ng/g NAS Guideline (whole fish).
Data Used to Assess Water Quality:	Two out of 2 samples exceeded (TSMP, 2002). A total of 2 whole fish composite samples of starry flounder and threespine stickleback were collected. The flounder sample was collected in 1992 and the stickleback in 1999. The guideline was exceeded in both samples.
Spatial Representation:	One station located just above the beach area at the mouth of the river.
Temporal Representation:	Samples were collected in 1992 and 1999.
Data Quality Assessment:	Toxic Substances Monitoring Program 1992-93 Data Report. Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program,1996-2000. Department of Fish and Game.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. CTR criteria for: Human Health (water consumption) = 0.00083 ppb for 4,4'-DDD.
Data Used to Assess Water	Samples were collected on the Santa Maria River on two occasions: in 2002 and

Quality:	2003. One of 2 measurements for 4,4'-DDD exceeded the human health criteria for water consumption (0.00083 ppb), (SWAMP, 2004).
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	Samples were collected on 9/3/2002 and 5/28/2003.
QA/QC Equivalent:	Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. Freshwater Sediment Criteria: DDD(sum) = 28.0 ppb
Data Used to Assess Water Quality:	Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) in 2002 and 2003 (SWAMP, 2004). Sediment was toxic at both stations in both samples. Sediment bulk-phase chemical analyses showed elevated concentrations of DDTs. In the Santa Maria River sample, the sediment criterion for DDD (sum) was not exceeded on either occasion.
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the

	Pacific Ocean.
Temporal Representation:	Samples were collected on 6/28/2002 and 10/22/2003.
QA/QC Equivalent:	Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. CTR criteria for: Human Health (water consumption) = 0.00059 ppb for 4,4'-DDE.
Data Used to Assess Water Quality:	Samples were collected on the Santa Maria River on two occasions: in 2002 and 2003 (SWAMP, 2004). Two of 2 measurements for 4,4'-DDE exceeded the human health criteria for water consumption (0.00059 ppb).
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	Samples were collected on 9/3/2002 and 5/28/2003.
QA/QC Equivalent:	Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the

	SWAMP QAPP, and are the labs participating in the SWAMP program.

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife Habitat
Matrix:	Sediment
Water Quality Objective/ Water Quality Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. Freshwater Sediment Criteria (Policy): DDE(sum) = 31.3 ppb
Data Used to Assess Water Quality:	Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) in 2002 and 2003 (SWAMP, 2004). Sediment was toxic at both stations in both samples. Sediment bulk-phase chemical analyses showed elevated concentrations of DDTs. In the Santa Maria River samples, the sediment criterion for DDE (sum) was exceeded in 2003, but not in 2002.
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	Samples were collected on 6/28/2002 and 10/22/2003.
QA/QC Equivalent:	Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Line of Evidence	Pollutant-Tissue

Beneficial Use	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife Habitat
Non-Numeric Objective:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Data Used to Assess Water Quality:	Concentrations of pesticides were measured in sand crabs (Emerita analoga) collected at the mouth of the Santa Maria River estuary in August 2000 (Dugan et al. 2004). These samples were collected as part of a larger coastline survey in Region 3 that collected sand crabs from a number of beaches. The range of sampling extended from Carpinteria Beach in Ventura County at the southern end of Region 3 to Scott Creek in Santa Cruz County at the northern end of Region 3. Concentrations of DDT in sand crab tissues at the mouth of the Santa Maria River were higher than any other site measured in Region 3, and were as high as 556 ng/g dry wt in samples nearest the Santa Maria River estuary. Mean concentrations of total DDT in sand crabs from the Santa Maria River area were 350 ng/g (dry wt). Results of a gradient study of tissues loads in sand crabs collected north and south of the river mouth confirmed that the Santa Maria River was the source of DDT in sand crab tissues. These results are consistent with previous BPTCP studies that found DDT in sediments from the Santa Maria River estuary were among the highest measured in the state (Total DDT = 679.5 ug/kg dry wt., Downing et al. 1998 Section VII). High total DDT in the sediment sample from this station corresponded with high sediment toxicity to amphipods (amphipod Eohaustorius estuarius mortality = 98%; Downing et al. 1998, Section II).
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean. Samples were collected at 4 sites at the mouth of the Santa Maria River: 150S, 300S, 450S, and 600S (river).
Temporal Representation:	Samples were collected during May and August 2000 and February 2001.

Region 3

Water Segment: Santa Maria River

Pollutant: Dieldrin

Decision: List

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

Three lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.1 There are sufficient number of samples exceeding the CTR Human Health Criteria for consumption of water and organisms. The site does not show significant sediment toxicity and the benthic community is not impacted.

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

This conclusion is based on the staff findings that:
1. There is a water column guideline available complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. Two of 2 samples were in exceedance of the CTR Human Health water and organism consumption criterion this exceed the allowable frequency listed in Table 3.1 of the Listing Policy. However, sediment samples were below the detection limit, and the benthic community in this water body is not impacted.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, FR - Freshwater Replenishment, GW - Groundwater

	Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. CTR Human Health Criterion for consumption of Water & Organisms = 0.00014 ppb.
Data Used to Assess Water Quality:	Samples were collected on the Lower Santa Maria River in September 2002 and May 2003 (SWAMP, 2004). Two of 2 samples were in exceedance of the criterion for water consumption, however both samples were below the freshwater acute criterion (0.24 ppb).
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	Samples were collected on 9/3/2002 and 5/28/2003.
QA/QC Equivalent:	Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife Habitat
Matrix:	Sediment

Water Quality Objective/ Water Quality Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. Freshwater Sediment criterion: max Dieldrin = 6.18 ppm
Data Used to Assess Water Quality:	Sediment was sampled in the Santa Maria River (SMA) in October 2003 and the dieldrin level was below the detection limit ((SWAMP, 2004).
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	One sample was collected on 10/22/2003.
QA/QC Equivalent:	Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.

Line of Evidence	Pollutant-Tissue
Beneficial Use	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, IN - Industrial Service Supply, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife Habitat
Non-Numeric Objective:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

	NAS Tissue guideline = 100 ppb
Data Used to Assess Water Quality:	Concentrations of pesticides were measured in sand crabs (Emerita analoga) collected at the mouth of the Santa Maria River estuary in August 2000 (Dugan et al. 2004). These samples were collected as part of a larger coastline survey in Region 3 that collected sand crabs from a number of beaches. The range of sampling extended from Carpinteria Beach in Ventura County at the southern end of Region 3 to Scott Creek in Santa Cruz County at the northern end of Region 3. Samples were all below the numeric criterion.
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean. Samples were collected at 4 sites at the mouth of the Santa Maria River: 150S, 300S, 450S, and 600S (river).
Temporal Representation:	Samples were collected during May and August 2000 and February 2001.

Region 3

Water Segment: Santa Maria River

Pollutant: Endrin

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 out of 2 samples exceeded the NAS guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Tissue

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

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Central Coast RWQCB Basin Plan: No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

Evaluation Guideline:	100 ng/g NAS guideline (whole fish).
Data Used to Assess Water Quality:	Two out of 2 samples exceeded (TSMP, 2002). A total of 2 whole fish composite samples of starry flounder and threespine stickleback and were collected. The flounder was collected in 1992 and the stickleback in 1999. The guideline was exceeded in both samples.
Spatial Representation:	One station located just above the beach area at the mouth of the river.
Temporal Representation:	Samples were collected in 1992 and 1999.
Data Quality Assessment:	Toxic Substances Monitoring Program 1992-93 Data Report. Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program,1996-2000. Department of Fish and Game

Region 3

Water Segment: Santa Rita Creek (San Luis Obispo County)

Pollutant: Nitrate as Nitrate (NO3)

Decision: List

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

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

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

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

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter

Water Quality Criterion:	15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as NO3) in Domestic or Municipal Supply is 45 mg/L).
Data Used to Assess Water Quality:	Three out of 12 samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004).
Spatial Representation:	Samples were collected from one site, SR1. Note that this site is a City of Salinas stormwater permit monitoring site and therefore, it is monitored during storm water events.
Temporal Representation:	Samples were collected from December 1999 through November 2000.
Environmental Conditions:	Water body is located in the Salinas hydrologic unit.
Data Quality Assessment:	City of Salinas stormwater permit monitoring site. CCAMP, SWAMP.

Region 3

Water Segment: Santa Ynez River (below city of Lompoc to Ocean)

Pollutant: Nitrate as Nitrate (NO3)

Decision: List

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

Currently, Santa Ynez River (below the City of Lompoc to Ocean) is listed for nutrients. It is not possible, in a general listing, to determine which specific pollutant is causing or contributing to water quality impacts. There is sufficient justification for removing the general listings for nutrients from the 303(d) list and replace these general listings with the specific pollutants when found to be exceeding.

One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.5 and 3.6, the site does have exceedances. Water toxicity has been documented in this water body. Fifteen of 84 samples exceeded the water quality objective.

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifteen of the 84 water samples exceeded the water quality guideline and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use:	MU - Municipal & Domestic
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL listed for Nitrate (as NO3) in Domestic or Municipal Supply is 45 mg/L).
Data Used to Assess Water Quality:	Fifteen of 40 samples collected at both sampling sites exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004; SWAMP, 2004). Forty four samples were collected at 3 sites located between the upper reach of the City of Lompoc and the Highway 154 crossing below the Lake Cachuma dam. There were no exceedances out of these 44 samples at these 3 sites.
Spatial Representation:	Samples were collected from five sites. Exceedances were detected in samples collected from two of the five sites (314SYF, 314SYN). These two sites showing exceedances also have extremely high ortho-phosphate levels. Upstream sites did not have exceedances. The sampling area with exceedances was below the City of Lompoc to the ocean.
Temporal Representation:	Samples were collected from January 2001 through March 2003.
Environmental Conditions:	The water body is located in the Santa Ynez hydrologic unit, Lompoc hydrologic area, Lompoc hydrologic subarea. The sites are located at Santa Ynez River at Highway 101 (314SYI), Santa Ynez River at Paradise Road (314SYP), Santa Ynez River downstream of Lake Cachuma (314SYC), Santa Ynez River downstream Lompoc at Floordale (314SYF), Santa Ynez River upstream Lompoc at Highway 246 (314SYL).
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

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

Lines of Evidence:

Line of Evidence	Remedial Program in Place
Beneficial Use	WA - Warm Freshwater Habitat
Information Used to Assess Water Quality:	A TMDL was approved by USEPA on January 14, 2003. The RWQCB is tracking the implementation of the TMDL through the Nitrate Management Plan being implemented by Santa Cruz County.

Region 3

Water Segment:	Shuman Canyon Creek
Pollutant:	Sedimentation/Siltation
Decision:	List
Weight of Evidence:	The data and information in the administrative record supports this change in the original listing recommendation. There was a misunderstanding of the applicable water body recommended for listing by staff. This change will correct that mistake. The correction is requested for San Antonio Creek (South Coast Watershed) Sedimentation/Siltation. This water body was incorrectly assigned to a sedimentation/siltation problem. The correct water bodies are Shuman Canyon Creek and Casmalia Canyon Creek. The 303(d) List Table should be revised to remove San Antonio Creek (South Coast Watershed) for Sedimentation/Siltation and add Casmalia Canyon Creek (4.5 miles) and Shuman Canyon Creek (3.0 miles) (313004) for Sedimentation/Siltation. The original listing recommendation originated with Regional Board staff, however there was a misunderstanding of the applicable water body recommended for listing by staff. This change will correct that mistake.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that a water body was incorrectly assigned to a sedimentation/siltation problem and that the listing should be revised with this water body and the listing should be changed as presented.
Lines of Evidence:	

Line of Evidence	Pollutant-Water
Beneficial Use	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), ES - Estuarine Habitat, FR - Freshwater Replenishment, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI - Wildlife Habitat
Information Used to Assess Water Quality:	See file: "FS - Correction-San Antonio Creek.doc" for further information.
Data Used to Assess Water Quality:	The correction is requested for San Antonio Creek (South Coast Watershed) Sedimentation/Siltation. This water body was incorrectly assigned to a sedimentation/siltation problem. The correct water bodies are Shuman Canyon Creek and Casmalia Canyon Creek.

	The 303(d) List Table should be revised to remove San Antonio Creek (South Coast Watershed) for Sedimentation/Siltation and add Casmalia Canyon Creek (4.5 miles) and Shuman Canyon Creek (3.0 miles) (313004) for Sedimentation/Siltation. The original listing recommendation originated with Regional Board staff, however there was a misunderstanding of the applicable water body recommended for listing by staff. This change will correct that mistake.
Spatial Representation:	3.0 miles.
Temporal Representation:	Correction Submittal on 6/14/2004.

Region 3

Water Segment: Soda Lake

Pollutant: Ammonia (Unionized) - Toxin

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 7 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat, MI - Fish Migration, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ The discharge of wastes shall not cause concentrations of unionized ammonia

Water Quality Criterion:	(NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4)
Data Used to Assess Water Quality:	Three out of seven samples exceeded the general water quality objective (CCAMP, 2004; SWAMP, 2004).
Spatial Representation:	Samples were collected from two sites. Exceedances were detected in samples collected from both sites.
Temporal Representation:	Samples were collected from January 2000 to May 2000.
Environmental Conditions:	The water body is located in the Carrizo Plain hydrologic unit, Carrizo Plain hydrologic subarea. Sites are located at Soda Lake Northeast (311SLE) and Soda Lake Culverts at Seven Mile Road (311SLN).
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

Water Segment: Tembladero Slough

Pollutant: Ammonia (Unionized) - Toxin

Decision: List

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

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

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 40 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: ES - Estuarine Habitat, RA - Rare & Endangered Species, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Matrix: Water

Water Quality Objective/ The discharge of wastes shall not cause concentrations of unionized ammonia

Water Quality Criterion:	(NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4)
Data Used to Assess Water Quality:	Six out of 40 samples exceeded the general water quality objective (CCAMP, 2004; SWAMP, 2004).
Spatial Representation:	Samples were collected from two sites. Exceedances were detected in water samples collected from both sites.
Temporal Representation:	Samples were collected from March 1999 to March 2003.
Environmental Conditions:	Water body is located in the Salinas hydrologic unit, Lower Salinas hydrologic subarea. The sites are located at Tembladero Slough at Monterey Dunes Way (309TDW) and Tembladero Slough at Preston (309TEM).
Data Quality Assessment:	CCAMP, SWAMP QAPP.

Region 3

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

Line of Evidence	Remedial Program in Place
Beneficial Use	R1 - Water Contact Recreation, R2 - Non-Contact Recreation
Information Used to Assess Water Quality:	A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Pathogens TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by USEPA on January 20, 2004.

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Central Coast Region (3)

DELIST

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

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Region 3

Water Segment: Blosser Channel

Pollutant: Fecal Coliform

Decision: Delist

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

One line of evidence is available in the administrative record to assess this pollutant. This data represents only the retention pond overflow as the up stream channel was dry most of the year. The original listing was faulty. Data were not representative of ambient water quality.

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. This data represents only the retention pond overflow as the up stream channel was dry most of the year. The original listing was faulty. Data were not representative of ambient water quality.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because the original listing was faulty.

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: R1 - Water Contact Recreation

Matrix: Water

Water Quality Objective/ Water Quality Criterion:	Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.
Data Used to Assess Water Quality:	Five of 10 samples exceed the water quality objectives (CCAMP, 2004).
Spatial Representation:	There was one sampling site. This data represents only the retention pond overflow as the upstream channel was dry most of the year.
Temporal Representation:	There were monthly sampling events. All 3 exceedances of the objective were during summer months when flows were primarily from the retention basin overflow. Since 2002 a new housing development is being built at the site location and the retention basin has been drained (since 2004).
Data Quality Assessment:	CCAMP

Region 3

Water Segment: Carpinteria Marsh (El Estero Marsh)

Pollutant: Sedimentation/Siltation

Decision: Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list under section 4 of the Listing Policy. The Policy calls for the delisting of waters if the decision is found to be based faulty data and it is demonstrated that the listing would not have occurred in the absence of such faulty data. One line of evidence is available in the administrative record to assess this pollutant.

The data cannot be found that was used to list this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for maintaining the listing for this water segment-pollutant combination.

This conclusion is based on the staff findings that no data is available to assess the status of this water body for this pollutant. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because no data are available to support the listing.

Lines of Evidence:

Line of Evidence Pollutant-Water

Beneficial Use BI - Preserva.of Bio.Hab.of Spec.Signif., ES - Estuarine Habitat, MI - Fish Migration, SP - Fish Spawning, WA - Warm Freshwater Habitat

Information Used to Assess Water Quality: Carpinteria Marsh was originally listed on the section 303(d) list because Regional Board staff observed erosion and sedimentation in the 1980s. This listing basis is faulty because it is not based on any data. Regional Board staff is not aware of evidence to indicate current water quality standard exceedances or beneficial use impacts related to the listing for this pollutant.

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

Region 3

Water Segment: Chumash Creek

Pollutant: Oxygen, Dissolved

Decision: Delist

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

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

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

This conclusion is based on the staff findings that:
1.The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2.The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.Forty of 245 samples taken over a period of 10 years exceeded the DO cold fresh water quality objective of 7 mg/l and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4.Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

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

Lines of Evidence:

Numeric Line of Evidence Adverse Biological Responses

Beneficial Use: CO - Cold Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:	COLD freshwater habitat water quality objective for D.O. = 7 mg/l (minimum).
Data Used to Assess Water Quality:	Chumash Creek was placed on the 2002 303(d) list as impaired from dissolved oxygen because levels fell below the COLD freshwater habitat water quality objective of 7 mg/l. Forty samples of a total of 245 samples taken between 1993 and 2003 fall below this value (CCRWQCB, 2004k).
Spatial Representation:	Measurements were taken at 310CHU on Chumash Creek, Calwater watershed no. 31022012.
Temporal Representation:	Two hundred forty five samples were collected over a ten year period of 6/8/1993-7/16/2003. Samples were collected on a monthly or bi-monthly basis.
QA/QC Equivalent:	Water column data collected by RWQCB staff in 1993-2001 were taken according to the National Monitoring Program Quality Assurance Program Plan. Samples taken in 2003 by the Morro Bay Volunteer Monitoring Program were taken according to protocols for dissolved oxygen sampling in the Morro Bay National Estuary Program's Quality Assurance Program Plan. The Morro Bay Volunteer Monitoring Program staff have routine correspondence with volunteers regarding data review, meter operation, and safety. Volunteer monitors collect dissolved oxygen data according to the Morro Bay National Estuary Program's Quality Assurance Program Plan.

Region 3

Water Segment: Espinosa Slough

Pollutant: Nutrients

Decision: Delist

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

No lines of evidence are available in the administrative record to assess this pollutant. This water body pollutant combination was originally listed without any supporting data. There has never been nor is there currently any data to support listing of this water body combination.

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

This conclusion is based on the staff findings that no samples were ever taken to determine if the nutrient water quality objective were exceeded. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Line of Evidence -N/A

Beneficial Use CM - Commercial and Sport Fishing (CA), R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Non-Numeric Objective: Request for delisting - Applicable water quality objectives include nutrient related water quality objectives, including: 1) the water quality objective for unionized ammonia of 0.025 mg/L-N, and 2) the narrative objective for biostimulatory substances stating that substances cannot cause

	nuisance aquatic growths.
Data Used to Assess Water Quality:	From delisting report: "The Espinosa Slough is currently listed on the 303(d) list as impaired for nutrients. Regional board staff propose delisting this water body. The Espinosa Slough is located in the lower Salinas River watershed. It was originally placed on the 303(d) list in 1994. At that time, virtually all water bodies located in the lower Salinas valley were listed for nutrients, and often without any supporting data. The listing was based on fact that the surrounding land use is irrigated agriculture, and was therefore believed to be impaired for nutrients. There has never been, nor is there currently, any data for this body of water. In addition, there exists no anecdotal information to suggest or support impairment."
Spatial Representation:	Espinosa Slough (Calwater watershed: 30911010) in Monterey County
Temporal Representation:	Submittal on 6/14/2004.

Region 3

Water Segment: Goleta Slough/Estuary

Pollutant: Metals

Decision: Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list under section 4 of the Listing Policy. The Policy calls for the delisting of waters if the decision is found to be based faulty data and it is demonstrated that the listing would not have occurred in the absence of such faulty data. One line of evidence is available in the administrative record to assess this pollutant.

The data cannot be found that was used to list this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for maintaining the listing for this water segment-pollutant combination.

This conclusion is based on the staff findings that no data is available to assess the status of this water body for this pollutant. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because no data are available to support the listing.

Lines of Evidence:

Line of Evidence Pollutant-Water

Beneficial Use ES - Estuarine Habitat, WA - Warm Freshwater Habitat

Information Used to Assess Water Quality: RWQCB staff have stated that State Mussel Watch, Toxic Substances Monitoring Programs and Regional Board sampling were probably used to develop this listing. The specific sample data referenced cannot be located in Regional Board files and exceedances cannot be verified. According to Dave Hubbard (UCSB), the fact that silver and copper associate with industrial activities was a possible reason the Slough was listed. However, these types of practices have not been occurring since the 1980s and are

probably not a source of impairment any longer.

It is unknown why the Slough was listed as impaired for metals in the first place.

Region 3

Water Segment: Goleta Slough/Estuary

Pollutant: Sedimentation/Siltation

Decision: Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list under section 4 of the Listing Policy. The Policy calls for the delisting of waters if the decision is found to be based faulty data and it is demonstrated that the listing would not have occurred in the absence of such faulty data. One line of evidence is available in the administrative record to assess this pollutant.

The data cannot be found that was used to list this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for maintaining the listing for this water segment-pollutant combination.

This conclusion is based on the staff findings that no data is available to assess the status of this water body for this pollutant. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because no data are available to support the listing.

Lines of Evidence:

Line of Evidence Adverse Biological Responses

Beneficial Use ES - Estuarine Habitat, WA - Warm Freshwater Habitat

Information Used to Assess Water Quality: Goleta Slough was placed on the section 303(d) list because Regional Board Staff observed erosion and sedimentation in the 1980s.

This listing is faulty because no data is available to support the listing. Regional Board staff are not aware of evidence to indicate current water quality standards exceedances or beneficial use impacts related to the listing for this pollutant.

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

Region 3

Water Segment: Monterey Bay South (Coastline)

Pollutant: Metals

Decision: Delist

Weight of Evidence: One line of evidence is available in the administrative record to assess this pollutant. The listing is faulty. The listing has been cited as metals rather than listing for the pollutant responsible for the impairment. There is no guideline for metals and it cannot be determined if the pollutant is likely to cause or contribute to the toxic effect.

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

This conclusion is based on the staff findings that:
1. The listing was based on EDLs that do not comply with the requirements of section 6.1.3 of the Policy and a water quality guideline for metals is not available that complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

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

Lines of Evidence:

Line of Evidence -N/A

Beneficial Use BI - Preserva.of Bio.Hab.of Spec.Signif., CM - Commercial and Sport Fishing (CA), MA - Marine Habitat, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WI - Wildlife Habitat

Non-Numeric Objective: Request to delist - Delisting report refers to OEHHA and USEPA tissue guidance values.

Data Used to Assess Water Quality:	There is a proposal to Delist Monterey Bay - South (shoreline) for Metals. The existing 1994 listing is based on State Mussel Watch (SMW) metals data from within Monterey Harbor (SMWP, 2004). No metals impairment exists outside of Monterey Harbor and Monterey Harbor is on the 303(d) List as a separate metals impairment listing (and will remain on the list). Regional Board files indicate State Mussel Watch Program data from 1982 through 1993 was used as the basis for listing Monterey Bay South for metals impairment. The available data from 1982 through 1993 were compared to Elevated Data Levels (EDLs) and Median International Standards (MIS). EDLs are no longer considered valid guidelines for determining attainment of water quality standards. The MIS values that were used as indicator values were derived from freshwater fish and therefore were not appropriate comparison values for mussel tissue data. MIS values also are not regulatory values or criteria in the United States. Subsequent to the 1994 listing, additional State Mussel Watch data from 1994 through 1997 has become available. All of the available data were compiled for this evaluation of Monterey Bay - South with respect to metals impairment.
Spatial Representation:	Monterey Bay - South coastline: 3309.5004, at Pacific Grove SMW station (SMW #414.0).
Temporal Representation:	Submittal on 6/14/2004. State Mussel Watch data from 1977 through 1997.

Region 3

Water Segment: Monterey Bay South (Coastline)

Pollutant: Pesticides

Decision: Delist

Weight of Evidence: One line of evidence is available in the administrative record to assess this pollutant. The listing is faulty. The listing has been cited as pesticides rather than listing for the pollutant responsible for the impairment. There is no guideline for pesticides and it cannot be determined if the pollutant is likely to cause or contribute to the toxic effect.

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

This conclusion is based on the staff findings that:
1. The listing was based on EDLs that do not comply with the requirements of section 6.1.3 of the Policy and a water quality guideline for pesticides is not available that complies with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

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

Lines of Evidence:

Line of Evidence -N/A

Beneficial Use BI - Preserva.of Bio.Hab.of Spec.Signif., CM - Commercial and Sport Fishing (CA), MA - Marine Habitat, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WI - Wildlife Habitat

Non-Numeric Objective: Request to delist - Delisting report refers to OEHHA and USEPA tissue guidance values.

Data Used to Assess Water Quality:	There is a proposal to Delist Monterey Bay - South (shoreline) for Pesticides. The existing 1994 listing is based on State Mussel Watch (SMW) pesticides data that was compared to Elevated Data Levels (EDLs - which are now considered inappropriate comparison values), (SMWP, 2004). The pesticide data from 1988 to present does not exceed current applicable guidance values and, in fact, the only station sampled since 1988 is the station that is used by the SMW program as a reference site for the central coast (presumed to be relatively unimpaired). No pesticide impairment exists outside of Moss Landing Harbor and Moss Landing Harbor will remain on the List as a separate pesticide impairment.
Spatial Representation:	Monterey Bay - South coastline: 3309.5004, at Pacific Grove SMW station (SMW #414.0).
Temporal Representation:	Submittal on 6/14/2004. State Mussel Watch data from 1982 through 1997.

Region 3

Water Segment: Morro Bay

Pollutant: Metals

Decision: Delist

Weight of Evidence: This combined pollutant listing is being considered for removal from the section 303(d) list under section 4 of the Listing Policy. The Policy calls for the delisting of waters if the decision is found to be faulty and it is demonstrated that the listing would not have occurred in the absence of such faulty data. Five different lines of evidence are available in the administrative record to assess this pollutant listing. The listing included Aluminum, Arsenic, Cadmium, Chromium, and Mercury, which were combined into one listing originally included in the 1996-303(d) metals listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of section 6.1.3 the Listing Policy.

With the exception of Arsenic, determination of exceedances for the remaining metals (individually evaluated) were either not possible because no criteria or guidelines were available but also no exceedances were recorded when compared with applicable acceptable standards either.

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

This conclusion is based on the staff findings that the guidelines used to assess the status of this water body for the set of metals evaluated does not meet the requirement of the Listing Policy but no exceedances were recorded when each metal was evaluated using acceptable guidelines. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

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

Lines of Evidence:

Numeric Line of Evidence	Pollutant-Tissue
Beneficial Use:	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat
Matrix:	Tissue
Evaluation Guideline:	OEHHA screening values of 0.3 ppm.
Data Used to Assess Water Quality:	None of the 12 samples exceeded the OEHHA screening value at the 4 sampling stations (Keeling, 2003).
Spatial Representation:	Four sites were sampled on Morro Bay: 427.0, 428.5, 429.0, and 429.2.
Temporal Representation:	Sampling occurred from 5-30-1980 to 1-20-1993.
Environmental Conditions:	This is one of five metals originally included in the 1996-303(d) metals listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of the Listing Policy. Two samples out of eight were found to be above the EDL 85 values (0.06 ppm) with concentrations of 0.136 ppm and 0.061 ppm wet weight on 1/26/1987 and 1/20/1993 respectively. Both samples were taken at site 429.2.
Data Quality Assessment:	State Mussel Watch Program Quality Assurance Plan.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses. Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses. Water quality objective in marine environment for total mercury is 0.1 ppb. Total mercury should not exceed 0.05ug/l as an average value; maximum acceptable concentration of total mercury in any aquatic organisms is a total BOD burden of 0.05 ug/l net weight.
Evaluation Guideline:	There are no acute or chronic criteria for dissolved mercury in saltwater t5hat meets the requirements of the Listing Policy .
Data Used to Assess Water Quality:	None of the five samples taken in Morro Bay exceeded because there are no guidelines for dissolved mercury in the saltwater column that meet the

	requirements of the Listing Policy (Keeling, 2003).
Spatial Representation:	Water was sampled from five (5) separate locations meant to represent the back, middle and front of the Bay and were also meant to represent the flow from the two creeks that feed the Bay (sites were Front Bay, Middle Bay, Back Bay, Mouth Chorro and Mouth Los Osos. The stations are: Back Bay, Mouth Los Osos, Mouth Chorro, Middle Bay and Front Bay.
Temporal Representation:	Water was sampled on March 8, 2001.
Data Quality Assessment:	Battelle Laboratory Quality Assurance Plan.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan numeric water quality objective for total chromium for the protection of marine habitats is 0.05 mg/l.
Evaluation Guideline:	There is no evaluation guideline for the dissolved fraction of chromium for the protection of aquatic like in marine waters that meets the requirements of the Listing Policy.
Data Used to Assess Water Quality:	None of the five samples taken can be compared with the established water quality objective because the established water quality objective is in the total form of chromium and the available data is reported in the dissolved fraction (Keeling, 2003).
Spatial Representation:	Water was sampled from five (5) separate locations representing the back, middle and front of the Bay including inflows from the mouth of Chorro and the mouth of Los Osos creeks that feed into the Bay. The stations are: Back Bay, Mouth Los Osos, Mouth Chorro, Middle Bay and Front Bay.
Temporal Representation:	Water was sampled on March 8, 2001.
Environmental Conditions:	This is one of five metals originally included in the 1996-303(d) metals listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of the Listing Policy.
Data Quality Assessment:	Battelle Laboratory Quality Assurance Plan.

Numeric Line of Evidence	Pollutant-Tissue
Beneficial Use:	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat
Matrix:	Tissue
Evaluation Guideline:	There is no numeric criteria or guideline that meets the requirements of the Listing Policy for chromium in tissue.
Data Used to Assess Water Quality:	None of the 12 samples could not be evaluated because there is no numeric criteria or guideline that meets the requirements of the Listing Policy for chromium in tissue (Keeling, 2003).
Spatial Representation:	Four sites were sampled on Morro Bay: 427.0, 428.5, 429.0, and 429.2.
Temporal Representation:	Site 429.0 was sampled on 6/28/1982, 1/21/1983 and 5/3/1983. Site 429.2 was sampled on 1/26/1987, 3/14/1988, 12/19/1988, 2/2/1990 and 1/20/1993. Sampling for all other sites occurred from 5-30-98 to 1-20-93.
Environmental Conditions:	This is one of five metals originally included in the 1996-303(d) metals listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of the Listing Policy.
Data Quality Assessment:	State Mussel Watch Program Quality Assurance Plan.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses. Material Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses. Water quality objective in marine environment - total concentration 0.2 ppb.
Evaluation Guideline:	CTR Saltwater acute 42 ug/l Criterion Maximum Concentration (CMC) and saltwater chronic 9.3 ug/l Criterion Continuous Concentration (CCC) criteria is applicable.
Data Used to Assess Water	None of five samples taken in Morro Bay exceeded any CTR criteria for

Quality:	dissolved cadmium in saltwater. Cadmium concentrations ranged from 0.0686 to 0.0349 ug/l (Keeling, 2003).
Spatial Representation:	Water was sampled from five (5) separate locations representing the back, middle and front of the Bay including the inflows from the mouth Chorro and the mouth of Los Osos creeks that feed into the Bay. The stations were: Back Bay, Mouth Los Osos, Mouth Chorro, Middle Bay and Front Bay.
Temporal Representation:	Water was sampled on March 8, 2001.
Environmental Conditions:	This is one of five metals originally included in the 1996-303(d) metals listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of the Listing Policy.
Data Quality Assessment:	Battelle Laboratory Quality Assurance Plan.

Numeric Line of Evidence	Pollutant-Tissue
Beneficial Use:	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat
Matrix:	Tissue
Evaluation Guideline:	USEPA standard of 4.0 ppm (wet weight) and OEHHA standard of 3.0 ppm (wet weight).
Data Used to Assess Water Quality:	None of 12 samples from the 4 stations were in exceedance when the data was reevaluated using USEPA and OEHHA criteria (Keeling, S. 2003).
Spatial Representation:	Four sites were sampled on Morro Bay: 427.0, 428.5, 429.0, and 429.2.
Temporal Representation:	Sampling occurred from 5-30-1980 to 1-20-1993.
Environmental Conditions:	This is one of five metals originally included in the 1996-303(d) metals listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of the Listing Policy. Site 429.2, on 1/26/1987, 3/14/1988, 12/19/1988, 2/2/1990 and 1/20/1993 had levels over the MIS values (levels ranged from 1.01 1.23 ppm wet weight). Five out of five samples at site 429.2 were over MIS. One out of three samples were above MIS values at site 429.0 (6/28/1982, 1.17 ppm wet weight).
Data Quality Assessment:	State Mussel Watch Program Quality Assurance Plan.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses. Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses.
Evaluation Guideline:	The CTR criteria for the dissolved fraction of selected metals are applicable for the protection of aquatic life but there are no criterion or guidelines for the dissolved fraction of aluminum that meet the requirements of the Listing Policy.
Data Used to Assess Water Quality:	No exceedances were recorded for all 5 samples because there are no criterion or guidelines for the dissolved fraction of aluminum that meet the requirements of the Listing Policy (Keeling, 2003).
Spatial Representation:	There were five sampling sites samples throughout Morro Bay. Locations represented the back, middle, and front of the Bay including inflows from Chorro and Los Osos Creeks. The stations were: Back Bay, Mouth Los Osos, Mouth Chorro, Middle Bay and Front Bay.
Temporal Representation:	Water was sampled on March 8, 2001.
Environmental Conditions:	This is one of five metals originally included in the 1996-303(d) metals listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of the Listing Policy.
Data Quality Assessment:	Battelle Laboratory Quality Assurance Plan.

Numeric Line of Evidence	Pollutant-Tissue
Beneficial Use:	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat
Matrix:	Tissue
Evaluation Guideline:	There is no tissue criteria for Aluminum.
Data Used to Assess Water Quality:	Originally, one out of 12 analyzed samples exceeded the EDL 85 of 138.43 ppm. However, no exceedances are currently recorded because there are no criterion or guidelines for aluminum in tissue that meet the

	requirements of the Listing Policy (Keeling, 2003).
Spatial Representation:	There were four stations sampled: 427.0, 428.5, 429.0 and 429.2.
Temporal Representation:	Site 429.0 was sampled on 6/28/1982, 1/21/1983 and 5/3/1983. Site 429.2 was sampled on 1/26/1987, 3/14/1988, 12/19/1988, 2/2/1990 and 1/20/1993. Site 427.0 was sampled 5-30-1980 and 12-14-1980. Site 428.5 was sampled 5-30-1980 and 12-14-1980.
Environmental Conditions:	This is one of five metals originally included in the 1996-303(d) metals listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of the Listing Policy (section 6.1.3.2).
Data Quality Assessment:	State Mussel Watch Program Quality Assurance Plan.

Line of Evidence	-N/A
Beneficial Use	CM - Commercial and Sport Fishing (CA), MA - Marine Habitat
Non-Numeric Objective:	Request for delisting. Applicable WQO or criterion: ·Basin Plans water quality objectives for marine water ·Basin Plans narrative objective for settleable and suspended material ·California Toxics Rule (Federal Register. Volume 65, No. 97. Part III. Environmental Protection Agency, 40 CFR Part 131. Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. Thursday, May 18, 2000.)
Data Used to Assess Water Quality:	Regional Board staff recommends delisting Morro Bay for metals based on the fact that (Keeling, S. 2003): ·Water quality objectives are currently being met in the water column, ·Metals present in the sediment appear to be the natural result of local geology and do not represent pollution, ·Levels of metals in tissue appear to be at reasonable levels considering the natural geology of the area, and ·There appears to be no correlation between the concentration of metals in the sediment and the water above it.
Spatial Representation:	Morro Bay (Calwater watershed 31023012), located on the central coast of California, about 60 miles north of Point Conception and about 100 miles south of Monterey Bay in San Luis Obispo County.
Temporal Representation:	Submittal on 6/14/2004.

Region 3

Water Segment: Salinas Reclamation Canal

Pollutant: Nitrogen, Nitrate

Decision: Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under section 4.1 a listing can be removed from the list if it was based on faulty data.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because the water body was erroneously designated to support the MUN beneficial use, the water quality objective therefore does not apply and applicable water quality standards for the pollutant are not exceeded.

Lines of Evidence:

Line of Evidence	-N/A
Beneficial Use	CM - Commercial and Sport Fishing (CA), R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat
Information Used to Assess Water Quality:	CCAMP and CCoWS datasets.
Non-Numeric Objective:	From the delisting report: "Applicable water quality objectives: the 303(d) listing is for nitrate, which is protected by the nitrate water quality objective protecting the MUN beneficial use. Since the water body is not designated to support the MUN beneficial use, the nitrate water quality objective does not apply."
Data Used to Assess Water Quality:	The Salinas Reclamation Canal is currently listed on the 303(d) list as impaired for nitrate. Regional Board staff propose delisting this water body for nitrate. The Salinas Reclamation Canal is located in the lower Salinas River watershed. It was placed on the 303(d) list in 2002. The Salinas Reclamation Canal was listed as impaired for nitrate because data indicated that the nitrate water quality objective protecting the MUN beneficial use was being exceeded. The nitrate water quality objective

	protecting the MUN beneficial use is 10 mg/L-N. The Salinas Reclamation Canal was erroneously listed as impaired for nitrate because it was assumed that this water body is designated to support the MUN beneficial use. However, the Salinas Reclamation Canal is not designated to support the MUN beneficial use, and the nitrate water quality objective therefore does not apply.
Spatial Representation:	Salinas Reclamation Canal (Calwater watershed: 30911010) in Monterey County.
Temporal Representation:	Submittal on 6/14/2004.

Region 3

Water Segment: Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant: Sedimentation/Siltation

Decision: Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list under section 4 of the Listing Policy. The Policy calls for the delisting of waters if the decision is found to be based faulty data and it is demonstrated that the listing would not have occurred in the absence of such faulty data. One line of evidence is available in the administrative record to assess this pollutant.

The data cannot be found that was used to list this pollutant originally.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for maintaining the listing for this water segment-pollutant combination.

This conclusion is based on the staff findings that no data is available to assess the status of this water body for this pollutant. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because no data are available to support the listing.

Lines of Evidence:

Line of Evidence Pollutant-Water

Beneficial Use WA - Warm Freshwater Habitat

Information Used to Assess Water Quality: No data are available to assess this listing.

This listing is faulty because no data area available to support the listing. Regional Board staff is not aware of evidence to indicate current water quality standards exceedances or beneficial use impacts related to the listing for this pollutant.

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

Region 3

Water Segment: Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant: Sedimentation/Siltation

Decision: Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list under section 4 of the Listing Policy. The Policy calls for the delisting of waters if the decision is found to be based faulty data and it is demonstrated that the listing would not have occurred in the absence of such faulty data. One line of evidence is available in the administrative record to assess this pollutant.

The data cannot be found that was used to list this pollutant originally.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for maintaining the listing for this water segment-pollutant combination.

This conclusion is based on the staff findings that no data is available to assess the status of this water body for this pollutant. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because no data are available to support the listing.

Lines of Evidence:

Line of Evidence Pollutant-Water

Beneficial Use WA - Warm Freshwater Habitat

Information Used to Assess Water Quality: No data are available to assess this listing.

This listing is faulty because no data area available to support the listing. Regional Board staff is not aware of evidence to indicate current water quality standards exceedances or beneficial use impacts related to the listing for this pollutant.

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

Region 3

Water Segment: Salinas River Lagoon (North)

Pollutant: Sedimentation/Siltation

Decision: Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list under section 4 of the Listing Policy. The Policy calls for the delisting of waters if the decision is found to be based faulty data and it is demonstrated that the listing would not have occurred in the absence of such faulty data. One line of evidence is available in the administrative record to assess this pollutant.

The original listing was based on visual observations. No data was used to list this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for maintaining the listing for this water segment-pollutant combination.

This conclusion is based on the staff findings that no data is available to assess the status of this water body for this pollutant. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because no data are available to support the listing.

Lines of Evidence:

Line of Evidence Pollutant-Water

Beneficial Use ES - Estuarine Habitat

Information Used to Assess Water Quality: Original listing was based on Regional Board staff visual observations of erosion. No data or QA/QC information available.

The basis for this listing basis is faulty because no data are available to support the listing. Regional Board staff is not aware of evidence to indicate current water quality standards exceedances or beneficial use

	impacts related to the listing for this pollutant.
Non-Numeric Objective:	Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

Region 3

Water Segment: Salinas River Refuge Lagoon (South)

Pollutant: Nutrients

Decision: Delist

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

One line of evidence is available in the administrative record to assess this pollutant. There has never been, nor is there currently, any data for this body of water.

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

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

Lines of Evidence:

Line of Evidence -N/A

Beneficial Use BI - Preserva.of Bio.Hab.of Spec.Signif., CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, MI - Fish Migration, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SH - Shellfish Harvesting, WA - Warm Freshwater Habitat, WI - Wildlife Habitat

Non-Numeric Objective: From delisting report: No applicable water quality objectives apply because the area cannot support beneficial uses as described in the Water Quality Control Plan. This is contradictory to the current Water Quality Control Plan that articulates beneficial uses to be supported; the Water Quality Control Plan will need to be amended.

Data Used to Assess Water The Salinas River Refuge Lagoon (South) is currently listed on the 303(d) list as impaired for nutrients. Regional Board staff propose delisting this

Quality:	water body. The Salinas River Refuge Lagoon (South) is located in the lower Salinas River watershed. It was originally placed on the 303(d) list in 1994. At that time, virtually all water bodies located in the lower Salinas valley were listed for nutrients, and often without any supporting data. The listing was based on fact that the surrounding land use is irrigated agriculture, and was therefore believed to be impaired for nutrients. There has never been, nor is there currently, any data for this body of water. In addition, there exists no anecdotal information to suggest or support impairment. Most importantly, the Salinas River Refuge Lagoon (South) is not a receiving water body of water flowing in the Salinas River Watershed. Rather, it is a depression in the land adjacent to the Pacific Ocean. The depression sporadically retains water during and after some high tide events and extreme rain events, and then soon returns to a terrestrial land area thereafter.
Spatial Representation:	Salinas River Refuge Lagoon (South) (Calwater watershed: 30911010) in Monterey County.
Temporal Representation:	Submittal on 6/14/2004.

Region 3

Water Segment:	Salinas River Refuge Lagoon (South)
Pollutant:	Pesticides
Decision:	Delist
Weight of Evidence:	This pollutant is being considered for removal from the section 303(d) list under section 4 of the Listing Policy. The Policy calls for the delisting of waters if the decision is found to be based faulty data and it is demonstrated that the listing would not have occurred in the absence of such faulty data. One line of evidence is available in the administrative record to assess this pollutant. The data cannot be found that was used to list this pollutant originally. Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for maintaining the listing for this water segment-pollutant combination. This conclusion is based on the staff findings that no data is available to assess the status of this water body for this pollutant. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because no data are available to support the listing.
Lines of Evidence:	

Line of Evidence	Testimonial Evidence
Beneficial Use	WA - Warm Freshwater Habitat
Information Used to Assess Water Quality:	No data are available. Regional Board staff is not aware of evidence to indicate current water quality standards exceedances or beneficial use impacts related to the listing for this pollutant.

Region 3

Water Segment: Salinas River Refuge Lagoon (South)

Pollutant: Salinity/TDS/Chlorides

Decision: Delist

Weight of Evidence: This pollutant is being considered for removal from the section 303(d) list under section 4 of the Listing Policy. The Policy calls for the delisting of waters if the decision is found to be based faulty data and it is demonstrated that the listing would not have occurred in the absence of such faulty data. One line of evidence is available in the administrative record to assess this pollutant.

The data cannot be found that was used to list this pollutant originally.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for maintaining the listing for this water segment-pollutant combination.

This conclusion is based on the staff findings that no data is available to assess the status of this water body for this pollutant. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because no data are available to support the listing.

Lines of Evidence:

Line of Evidence Testimonial Evidence

Beneficial Use WA - Warm Freshwater Habitat

Information Used to Assess Water Quality: No data are available. Regional Board staff is not aware of evidence to indicate current water quality standards exceedances or beneficial use impacts related to the listing for this pollutant.

The Refuge Lagoon experiences a wide range of salinities depending on the stage of the Salinas River. During high flows, the Refuge Lagoon may be inundated by the Salinas River and therefore may experience salinities

comparable to freshwater (<1 ppt). During high surf, breakers may overtop the dunes to the west of the refuge lagoon and it may experience salinities comparable to seawater (~35 ppt). During the summer, the refuge lagoon may evaporate, raising salinity concentrations to over 150 ppt. These are all natural states for the water body as it's configured today therefore the Salinas River Refuge Lagoon (South) should be delisted for Salinity/TDS/Chlorides.

Region 3

Water Segment:	San Antonio Creek (South Coast Watershed)
Pollutant:	Sedimentation/Siltation
Decision:	Delist
Weight of Evidence:	The data and information in the administrative record supports this change to correct an incorrectly assigned pollutant/water body combination.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.

Lines of Evidence:

Line of Evidence	-N/A
Beneficial Use	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), GW - Groundwater Recharge, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI - Wildlife Habitat
Information Used to Assess Water Quality:	
Non-Numeric Objective:	
Data Used to Assess Water Quality:	The correction is requested for San Antonio Creek (South Coast Watershed) Sedimentation/Siltation. This water body was incorrectly assigned to a sedimentation/siltation problem. The correct water bodies are Shuman Canyon Creek and Casmalia Canyon Creek. The 303(d) List Table should be revised to remove San Antonio Creek (South Coast Watershed) for Sedimentation/Siltation and add Casmalia Canyon Creek (4.5 miles) and Shuman Canyon Creek (3.0 miles) (313004) for Sedimentation/Siltation. The original listing recommendation originated with Regional Board staff,

	however there was a misunderstanding of the applicable water body recommended for listing by staff. This change will correct that mistake.
Spatial Representation:	San Antonio Creek (South Coast Watershed)
Temporal Representation:	Correction Submittal on 6/14/2004.

Region 3

Water Segment: San Luis Obispo Creek (Below W Marsh Street)

Pollutant: Priority Organics

Decision: Delist

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

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

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

This conclusion is based on the staff findings that:
1. The guidelines used do not satisfy the requirements of section 6.1.3 of the Policy.
2. The listing was based on MTRLs and EDLs which are not allowed by the Listing Policy.
3. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

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

Lines of Evidence:

Line of Evidence -N/A

Beneficial Use AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, GW - Groundwater Recharge, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SP - Fish Spawning, WI - Wildlife Habitat

Non-Numeric Objective: Request for delisting - document mentions criteria based on:

	OEHHA and USEPA tissue guidance values CTR for water column data
Data Used to Assess Water Quality:	This is a proposal to remove San Luis Obispo Creek from the 303(d) list for priority organics. San Luis Obispo Creek (Creek) was placed on the 1998 303(d) list as impaired from priority organics because levels of PCB, HCH (lindane) and chlordane exceeded MTRLs and EDLs. A total of two tissue samples were used to list the Creek as impaired (CVRWQCB, 2004N). MTRLs and EDLs are no longer considered criteria for placing water bodies on the 303(d) list. RWQCB staff have therefore developed a listing rationale for organic compounds. The rationale is largely based on efforts by Dave Smith and Peter Kozelka of EPA and their work on the Newport Bay/San Diego Creek toxicity TMDL. The rationale is compiled in a document held in Region-3 titled Decision Document for the Elkhorn Slough. The rationale is used herein as support for recommending that the Creek be delisted for priority organics. The RWQCB of the Central Coast Region recommends delisting San Luis Obispo Creek as impaired by priority organics. RWCB staff make this recommendation based on the analysis presented in the delisting report concluding that there exists insufficient evidence suggesting that the constituents of concern (PCB, chlordane, and HCH) are present at levels posing a risk to humans or wildlife.
Spatial Representation:	San Luis Obispo Creek in San Luis Obispo County near and including the City of San Luis Obispo - Hydrologic Unit 310.240

Region 3

Water Segment: Waddell Creek, East Branch

Pollutant: Nutrients

Decision: Delist

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

One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective.

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

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 54 samples exceeded the unionized ammonia water quality objective and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

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

Lines of Evidence:

Line of Evidence -N/A

Beneficial Use BI - Preserva.of Bio.Hab.of Spec.Signif., CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SP - Fish Spawning, WI -

Wildlife Habitat

Non-Numeric Objective:

From delisting report:
The Water Quality Control Plan, Central Coast Region (Basin Plan), contains the following unionized ammonia objective:
The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters.
The Water Quality Control Plan, Central Coast Region (Basin Plan), contains the following narrative objective:
Biostimulatory Substances:
Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
This objective does not prohibit biostimulatory substances; it only prohibits biostimulatory substances that cause nuisance or adversely affects beneficial uses.

Data Used to Assess Water Quality:

Fifty four samples were collected and the objective was never violated (CVRWQCB, 2004B).

From Report:
"The east fork of the Waddell Creek was listed as impaired for nutrients in 1990. The creek was listed because of ammonia violations at the NPDES facility, California Department of Parks and Recreation, Big Basin Redwoods State Park Wastewater Treatment Plant. Another reason for the listing was the California Department of Fish and Game issued a report in 1980 indicating dense growths of filamentous algae were growing downstream of the treatment plant in sunlight areas. They attributed the algal growth to nutrients."

"Ammonia discharge violations have reoccurred in the past but no violations have occurred since 2002. Ammonia is converted to nitrate through the nitrogen cycle and becomes available as a possible promoter of plant growth. Since the listing in 1990, the treatment plant has been upgraded. The upgrade included the addition of clinoptolite filtration for ammonia removal." Ammonia violations have dramatically decreased since 1998.

Spatial Representation:

Waddell Creek, East Branch (Calwater Watershed: 30411010), located in Santa Cruz County, California approximately two-thirds of the way from San Francisco to Monterey Bay. Samples were collected at: West Waddell Creek upstream confluence of East Waddell Creek; Opal Creek upstream confluence of East Waddell Creek; Blooms Creek upstream confluence of East Waddell Creek; East Branch of Waddell Creek 145 feet upstream of NPDES discharge; East Branch of Waddell Creek 100 feet downstream of NPDES discharge; East Branch of Waddell Creek approximately 1000 feet upstream of old Last Chance Road bridge crossing; East Branch of Waddell Creek at old Last Chance Road bridge crossing; East Waddell Creek upstream confluence of West Waddell Creek; Lower Waddell Creek ~ one mile downstream confluence of East and West Waddell Creek; Lower Waddell @ Alder Camp; Lower Waddell @ bridge; Lower Waddell @ Marsh Trail.

Temporal Representation:	Started sampling and collecting information on September 24, 2002. We completed the sampling and collection on October 7, 2003.

Region 3

Water Segment: Watsonville Slough

Pollutant: Sedimentation/Siltation

Decision: Delist

Weight of Evidence: This pollutant is being considered for delisting under sections 4.9 of the Listing Policy. Under section 4.9, a minimum of two lines of evidence are needed to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. No data is presented to show impacts or lack of impacts on aquatic life populations or communities. Suspended solids concentrations are well below the level that may impact at least one species present in Watsonville Slough. Visual assessment of sedimentation did not reveal any probable impacts.

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

This conclusion is based on the staff findings that:
1. The guideline used complies generally with the requirements of section 6.1.3 of the Policy.
2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
4. None of the 338 samples exceeded the evaluation guideline. No data are available to show impacts on aquatic life.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:	Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect surface waters.
Evaluation Guideline:	Three spine stickleback occurs in the Slough and in studies no mortality was observed in a test to identify the lethal threshold for sediment at a concentration of 28,000 mg/L (LeGore and Des Voigne, 1973).
Data Used to Assess Water Quality:	Sediment concentration has been studied by many investigators. All available data was reviewed and summarized by (Hager, J. and F. Watson 2005). For suspended sediment concentration, 338 representative measurements are available. None of the measurements exceed the sediment threshold.
Spatial Representation:	Samples were collected at least 13 stations throughout the slough system.
Temporal Representation:	Samples were collected between 1976 and 2004 during all seasons.
Data Quality Assessment:	Most of the data were collected under a Quality Assurance Project Plan prepared by Central Coast Watershed Studies, The Watershed Institute at California State University Monterey Bay.

Line of Evidence	Narrative Description Data
Beneficial Use	WA - Warm Freshwater Habitat
Information Used to Assess Water Quality:	Smothering of benthic habitat by sedimentation was not significantly evident, but was also difficult to study. A visual reconnaissance was conducted for signs of excessive recent sedimentation. Unequivocal smothering of habitat could only be documented photographically in small portions of the Watsonville Slough system. Other areas were either stable, contained coarse sediment, contained fine sediment in amounts that did not contradict the expectation of a natural system, were under water, or were not accessible (Hager, J. and F. Watson 2005).
Non-Numeric Objective:	Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect surface waters.

Line of Evidence	Narrative Description Data
Beneficial Use	WA - Warm Freshwater Habitat
Information Used to Assess	Long-term aggregation of sediments and reduction in aquatic habitat volume was not evident. Aquatic habitat volume appears to be increasing

Water Quality:	due to land subsidence associated with de-watering of the area for peat mining and agriculture in the early 1900s, ground water pumping, and possibly local seismic activity. Scientists re-surveyed an old road survey across Struve Slough and Watsonville Slough, and found evidence of subsidence on the order of 10 to 20 mm/year since 1952. Obtained sediment cores in the tidal marsh of lower Watsonville Slough dating back to the 1400s and they were analyzed using radiocarbon dating, pollen, and lead-210. The data suggested an anthropogenic increase in sedimentation surrounding the expansion of agriculture in the first half of the 1900s, but net sedimentation rates since about 1950 appear to have been lower than in pre-historic times. This is likely attributed to decreased sediment supply to the lower reaches resulting from subsidence and the construction of the tide gates in the 1940s (Hager, J. and F. Watson 2005).
Non-Numeric Objective:	Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect surface waters.

Central Coast Region (3)

Area Change

Recommendations to change the area affected by pollutants on the section 303(d) List

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Region 3

Water Segment:	Alamo Creek
Pollutant:	Fecal Coliform
Decision:	Accept Area Change
Weight of Evidence:	The data and information in the administrative record supports this change in estimated size affected.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the estimated size affected should be changed as presented.
Lines of Evidence:	

Line of Evidence	-N/A
Beneficial Use	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, GW - Groundwater Recharge, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI - Wildlife Habitat
Data Used to Assess Water Quality:	Email from Lisa McCann of RWQCB3 including the following files: "FS - Correction-maps Rec Canal-Alamo-Or-Sol-LosOsosRevised.doc" and "Map_Alamo Creek, Orcutt Solomon_correction.doc". The map shows requested changes and states "Include this reach for Alamo Creek" (the reach above 312ALA). This reach has been identified as an incorrect reach identified as a listed water body on the shapefile for all listed pollutants.
Spatial Representation:	Alamo Creek (312) in Santa Barbara County.
Temporal Representation:	Email from Lisa McCann dated 7/14/2004.

Region 3

Water Segment: Los Osos Creek

Pollutant:

Decision: Accept Area Change

Weight of Evidence: The data and information in the administrative record supports this change in estimated size affected.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the estimated size affected should be changed as presented.

Lines of Evidence:

Line of Evidence	-N/A
Beneficial Use	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, SP - Fish Spawning, WA - Warm Freshwater Habitat, WI - Wildlife Habitat
Information Used to Assess Water Quality:	See files: "FS - Correction-maps Rec Canal-Alamo-Or-Sol-LosOsosRevised.doc" and "Map_Los Osos Creek_correction_Revised.doc".
Non-Numeric Objective:	Map changes-no objective.
Data Used to Assess Water Quality:	Email from Lisa McCann of RWQCB3 including the following files: "FS - Correction-maps Rec Canal-Alamo-Or-Sol-LosOsosRevised.doc" and "Map_Los Osos Creek_correction_Revised.doc". The map shows requested changes and states "Remove upper reaches of Los Osos Creek From 303(d) shapefile". This reach has been identified as an incorrect reach identified as a listed water body on the shapefile for all listed pollutants.
Spatial Representation:	This map change request affects the upper reaches of Los Osos Creek in San Luis Obispo County.
Temporal Representation:	Email from Lisa McCann dated 7/14/2004.

Region 3

Water Segment:	Orcutt Creek
Pollutant:	
Decision:	Accept Area Change
Weight of Evidence:	The data and information in the administrative record supports this change in estimated size affected.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the estimated size affected should be changed as presented.
Lines of Evidence:	

Line of Evidence	-N/A
Beneficial Use	AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, ES - Estuarine Habitat, FR - Freshwater Replenishment, GW - Groundwater Recharge, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WI - Wildlife Habitat
Data Used to Assess Water Quality:	Email from Lisa McCann of RWQCB3 including the following files: "FS - Correction-maps Rec Canal-Alamo-Or-Sol-LosOsosRevised.doc" and "Map_Alamo Creek, Orcutt Solomon_correction.doc". The map shows requested changes and states "Add the reach between 3120RC and 3120RI to shape file and listing for fecal and nitrate".
Spatial Representation:	Orcutt-Solomon Creek (312) in Santa Barbara County.
Temporal Representation:	Email from Lisa McCann dated 7/14/2004.

Region 3

Water Segment:	Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)
Pollutant:	Total Coliform
Decision:	Accept Area Change
Weight of Evidence:	The data and information in the administrative record supports this change in correctly assigning the water body pollutant combination to this area.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the estimated size affected should be changed as presented.

Lines of Evidence:

Line of Evidence	Pollutant-Water
Beneficial Use	R1 - Water Contact Recreation
Information Used to Assess Water Quality:	See file: "3-5u_FS - Correction-Arroyo Burro Creek pathogens.doc" for further information.
Data Used to Assess Water Quality:	The correction is requested for Arroyo Burro Creek Pathogens (Cal Watershed 31532010). This water body was incorrectly assigned to a pathogen problem. The correct water body is the Pacific Ocean at Arroyo Burro Beach (Santa Barbara County). Arroyo Burro Creek was listed in 1998 because of beach closures. Therefore, the beach, rather than the creek, should have been listed. The Pacific Ocean at Arroyo Burro Creek is on the 2002 303(d) List (for Total Coliform). Therefore the only correction necessary is to delete Arroyo Burro Creek.
Spatial Representation:	Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)
Temporal Representation:	Correction Submittal on 6/14/2004. Original listing in 1998.

Line of Evidence	Pollutant-Water

Beneficial Use	R1 - Water Contact Recreation
Information Used to Assess Water Quality:	See file: "3-5t_FS - Correction- Santa Barbara Co Beaches.doc" for further information.
Data Used to Assess Water Quality:	There are three beaches in Santa Barbara County that have a larger impacted size than most of the other beaches. We believe the extent of impairment should be similar to the convention used for most Santa Barbara County beaches. There is no evidence in the record to support the larger areal extent indicated on the current list. Please reduce the size for Pacific Ocean at Arroyo Burro Beach from 3.1 miles to 0.06 miles.
Spatial Representation:	Pacific Ocean at Arroyo Burro Beach, in Santa Barbara County (31532010). Change from 3.1 miles to 0.06 miles.
Temporal Representation:	Correction Submittal on 6/14/2004.

Region 3

Water Segment: Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

Pollutant: Coliform Bacteria

Decision: Accept Area Change

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

One line of evidence is available in the administrative record to assess this pollutant. The available line of evidence requests a correction in the aerial extent of coliform bacteria impairment. There are three beaches in Santa Barbara County that have a larger impacted size than most of the other beaches. The extent of impairment should be similar to the convention used for most Santa Barbara County beaches. There is no evidence to support the larger aerial extent indicated on the current list. The extent of impairment for Pacific Ocean at Carpinteria State Beach should be reduced from 0.35 miles to 0.06 miles.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list but the size extent of the impairment should be reduced from 0.35 miles to 0.06 miles. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be removed from on the section 303(d) list because applicable water quality standards are exceeded but the size of the impaired area is smaller than originally listed.

Lines of Evidence:

Line of Evidence Pollutant-Water

Beneficial Use AG - Agricultural Supply

Information Used to Assess Water Quality: See file: "3-5t_FS - Correction- Santa Barbara Co Beaches.doc" for further information.

Non-Numeric Objective:	Correction - no objective.
Data Used to Assess Water Quality:	There are three beaches in Santa Barbara County that have a larger impacted size than most of the other beaches. We believe the extent of impairment should be similar to the convention used for most Santa Barbara County beaches. There is no evidence in the record to support the larger aerial extent indicated on the current list. Please reduce the size for Pacific Ocean at Carpinteria State Beach from 0.35 miles to 0.06 miles.
Spatial Representation:	Pacific Ocean at Carpinteria State Beach, Carpinteria Creek mouth in Santa Barbara County (31534020). Change from 0.35 miles to 0.06 miles.
Temporal Representation:	Correction Submittal on 6/14/2004.

Region 3

Water Segment:	Pacific Ocean at Jalama Beach (Santa Barbara County)
Pollutant:	Bacteria
Decision:	Accept Area Change
Weight of Evidence:	The data and information in the administrative record supports this change in estimated size affected.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the estimated size affected should be changed as presented.

Lines of Evidence:

Line of Evidence	-N/A
Beneficial Use	AQ - Aquaculture
Information Used to Assess Water Quality:	See file: "3-5t_FS - Correction- Santa Barbara Co Beaches.doc" for further information.
Data Used to Assess Water Quality:	There are three beaches in Santa Barbara County that have a larger impacted size than most of the other beaches. We believe the extent of impairment should be similar to the convention used for most Santa Barbara County beaches. There is no evidence in the record to support the larger aerial extent indicated on the current list. Please reduce the size for Pacific Ocean at Jalama Beach from 3.3 miles to 0.06 miles.
Spatial Representation:	Pacific Ocean at Jalama Beach, in Santa Barbara County (31510051). Change from 3.3 miles to 0.06 miles.
Temporal Representation:	Correction Submittal on 6/14/2004.

Region 3

Water Segment:	Rider Creek
Pollutant:	
Decision:	Accept Area Change
Weight of Evidence:	The data and information in the administrative record supports this change in water body name.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body name should be changed as presented.
Lines of Evidence:	

Line of Evidence	-N/A
Beneficial Use	CM - Commercial and Sport Fishing (CA), CO - Cold Freshwater Habitat, GW - Groundwater Recharge, MI - Fish Migration, MU - Municipal & Domestic, R1 - Water Contact Recreation, R2 - Non-Contact Recreation, SP - Fish Spawning, WI - Wildlife Habitat
Information Used to Assess Water Quality:	See files: "3-5s_FS - Correction- Rider Creek.doc", "3-5kk_Map_Rider Creek1.jpg", and "3-5ll_Map_Rider Creek2 - topo.jpg" for further information.
Data Used to Assess Water Quality:	This submission is a request to correct the name of a listed water body. The incorrect name of the listed water body is Rider Gulch Creek. This name should be corrected to Rider Creek. Associated figures included a photocopy of USGS 7.5-minute quadrangle map, Loma Prieta, California (1996) and a GIS figure that was derived from the CALWTR3 dataset. The CALWATER watershed number that is referenced on the 303d list is correct (30510010).
Spatial Representation:	Rider Creek (CAL Watershed 30510010).
Temporal Representation:	Correction Submittal on 6/14/2004.

Region 3

Water Segment:	Salinas Reclamation Canal
Pollutant:	None
Decision:	Accept Area Change
Weight of Evidence:	The data and information in the administrative record supports this change in estimated size affected.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the estimated size affected should be changed as presented.
Lines of Evidence:	

Line of Evidence	-N/A
Beneficial Use	CM - Commercial and Sport Fishing (CA), R1 - Water Contact Recreation, R2 - Non-Contact Recreation, WA - Warm Freshwater Habitat, WI - Wildlife Habitat
Data Used to Assess Water Quality:	The Salinas Reclamation Canal is not identified, nor is it included in the Reach3 file. This water body needs to be added to the shapefile and identified as listed. The map shows the reaches to be added and states "Add Water body and show listing. Salinas Reclamation Canal flows parallel to Alisal Slough."
Spatial Representation:	Salinas Reclamation Canal (309) in Monterey County.
Temporal Representation:	Request submitted via email on 7/14/2004.

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