

STAFF REPORT
VOLUMES I & II

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



JANUARY 2003

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

**STAFF REPORT
VOLUME I**

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



JANUARY 2003

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



Page left blank intentionally.

STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER QUALITY

STAFF REPORT

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

VOLUME I

DRAFT

January 2003
FINAL

This is a draft document that is subject to revision.

Preface

The State Water Resources Control Board (SWRCB) is required to review, make changes as necessary, and submit the Clean Water Act section 303(d) list to the U.S. Environmental Protection Agency (USEPA).

This document presents the proposals for additions, deletions, and changes to the 1998 California 303(d) List as well as recommendations for Total Maximum Daily Load (TMDL) priorities. Also proposed is development of an Enforceable Programs List, Monitoring List, and TMDLs Completed List. The report provides a summary of the recommended list changes and the SWRCB staff analysis of the data and information as well as the Regional Water Quality Control Board (RWQCB) recommendations.

The Staff Report has four parts: (1) Volume I contains the listing methodology and a summary of the proposed additions, deletions, changes, and priorities; (2) Volume II contains summaries of the proposals for the North Coast, San Francisco Bay, Central Coast, and Los Angeles Regional Water Quality Control Boards (RWQCBs); (3) Volume III contains summaries of the proposals for the Central Valley, Lahontan, Colorado River Basin, Santa Ana, and San Diego RWQCBs; and (4) Volume IV contains the SWRCB staff responses to comments.

The SWRCB heard testimony at northern and southern California hearings on the proposed changes to the 1998 section 303(d) list. Responses to all of the comments received have been developed and several changes to the list and supporting documents have been made. The SWRCB considered the 2002 section 303(d) list submittal at its November 2002 Workshop and will consider approval at a February 2003 Board Meeting. Once approved by the SWRCB, the list and supporting information will be submitted to USEPA.

Table of Contents

PREFACE.....	I
TABLE OF CONTENTS.....	II
LIST OF ABBREVIATIONS.....	III
INTRODUCTION.....	1
BACKGROUND.....	1
METHODOLOGY USED TO DEVELOP THE LIST.....	2
ASSUMPTIONS	2
SOLICITATION	3
RWQCB ANALYSIS AND RECOMMENDATIONS.....	3
SWRCB REVIEW OF RWQCB RECOMMENDATIONS	4
SETTING PRIORITIES AND SCHEDULES FOR COMPLETING TMDLS	14
PUBLIC PARTICIPATION CONDUCTED BY THE SWRCB	15
ADDITIONS, DELETIONS, AND CHANGES TO THE SECTION 303(D) LIST	15
PRIORITIES AND SCHEDULES.....	15
TMDLS COMPLETED LIST.....	15
ENFORCEABLE PROGRAM LIST	16
MONITORING LIST	16
CHANGES IN PRESENTATION OF THE WATER BODIES	17
ADMINISTRATIVE RECORD.....	17
REFERENCES.....	17
TABLE 1: PROPOSED ADDITIONS TO THE SECTION 303(D) LIST	ADDITIONS-1
TABLE 2: PROPOSED DELETIONS FROM THE 1998 SECTION 303(D) LIST.....	DELETIONS-1
TABLE 3: CHANGES PROPOSED FOR EXISTING LISTINGS ON THE 1998 SECTION 303(D) LIST	CHANGES-1
TABLE 4: PROPOSED PRIORITIES FOR THE 2002 SECTION 303(D) LIST	PRIORITIES-1
TABLE 5: TMDLS COMPLETED LIST	TMDLS COMPLETED-1
TABLE 6: PROPOSED ENFORCEABLE PROGRAM LIST.....	ENFORCEABLE PROGRAMS-1
TABLE 7: PROPOSED MONITORING LIST.....	MONITORING-1
TABLE 8: CHANGES IN PRESENTATION OF WATER BODIES ON THE 1998 SECTION 303(D) LIST VERSUS THE PROPOSED 2002 SECTION 303(D) LIST.....	PRESENTATION-1
APPENDIX: 1998 CALIFORNIA 303(D) LIST AND TMDL PRIORITY SCHEDULE.....	APPENDIX-1

List of Abbreviations

ASBS	Area of Special Biological Significance
ASTM	American Society of Testing and Materials
AU	Assessment unit
BMP	Best Management Practice
BP	Basin Plan
BPTCP	Bay Protection and Toxic Cleanup Program
BU	Beneficial Use
C	Celsius
CalEPA	California Environmental Protection Agency
CAO	Cleanup and Abatement Order
CCAMP	Central Coast Ambient Monitoring Program
CCC	Criteria Continuous Concentration
CCR	California Code of Regulations
CDF	California Department of Forestry and Fire Protection
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFCP	Coastal Fish Contamination Program
CFR	Code of Federal Regulations
Chem A Pesticides	Aldrin, dieldrin, chlordane, endrin, heptachlor epoxide, hexachlorocyclohexane (including lindane), endosulfan, and toxaphene
CMC	Criteria Maximum Concentration
CSO	Combined Sewer Overflow
CVP	Central Valley Project
CWA	Clean Water Act
DCE	Dichloroethylene
DDE	Dichlorodiphenyldichloroethylene
DDT	Dichlorodiphenyltrichloroethane
DFG	Department of Fish and Game
DHS	Department of Health Services
DO	Dissolved oxygen
DPR	Department of Pesticide Regulation
EBMUD	East Bay Municipal Utilities District
EDL	Elevated Data Level
EIR	Environmental Impact Report
EQIP	Environmental Quality Incentives Program
ERL	Effects Range Low
ERM	Effects Range Median
FDA	U.S. Food and Drug Administration
GeoWBS	Geospatial Water Body System
Group A Pesticides	Aldrin, dieldrin, chlordane, endrin, heptachlor epoxide, hexachlorocyclohexane (including lindane), endosulfan, and toxaphene
GVWTP	Grass Valley Wastewater Treatment Plant
HCH	hexachlorocyclohexane
HAS	Hydrologic Sub Area
HU	Hydrologic Unit

IR	Installation Restoration
kg	kilogram(s)
LOEL	Lowest Observed Effect Level
MBNMP	Morro Bay National Monitoring Program
MCL	Maximum Contaminant Level
MDL	Method Detection Limit
mg/kg	milligrams per kilogram (parts per million)
mg/l	milligrams per liter (parts per million)
ug/l	micrograms per liter (parts per billion)
MPN	Most Probable Number
MTBE	Methyl t-butyl ether
MTRL	Maximum Tissue Residue Level
MWAT	Maximum Weekly Average Temperature
MWMT	Maximum Weekly Maximum Temperature
NAS	National Academy of Sciences
NDN	Nitrification/denitrification
ng/l	nanograms per liter (parts per trillion)
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOEL	No Observed Effect Level
NPDES	National Pollutant Discharge Elimination System
NPS	Nonpoint Source
NRCS	Natural Resources Conservation Service
NRDC	Natural Resources Defense Council
NWRAQ	National Water Recommended Ambient Quality
OAL	Office of Administrative Law
OEHHA	Office of Environmental Health Hazard Assessment
OP	Organophosphorous Pesticides
PAH	polynuclear aromatic hydrocarbon
PBDE	polybrominated diphenyl ethers
PBO	Piperonyl butoxide
PCB	polychlorinated biphenyl
PCE	tetrachloroethylene
PEL	Probable Effects Level
PMP	Pesticide Management Plan
POTW	Publicly Owned Treatment Works
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Procedure Plan
RB	Regional Board
RBI	Relative Benthic Index
RCD	Resource Conservation District
RL	Reporting Level
RMP	Regional Monitoring Program
RWQCB	Regional Water Quality Control Board
SBCPHD	Santa Barbara County Public Health Department
SCRWA	South County Regional Wastewater Authority
SFEI	San Francisco Estuary Institute
SMWP	State Mussel Watch Program
SSO	Site Specific Objective

SWAMP	Surface Water Ambient Monitoring Program
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
SWRP	Sacramento River Watershed Program
TBT	Tributyltin
TCE	Tetrachloroethylene
TDS	Total Dissolved Solids
THP	Timber Harvest Plan
THS	Toxic Hot Spot
TIE	Toxicity Identification Evaluation
TL	Trophic level
TMDL	Total Maximum Daily Load
TPH	Total Petroleum Hydrocarbon
TSMP	Toxic Substance Monitoring Program
TSS	Total Suspended Solids
TU	Toxic Unit
UAA	Use Attainability Analysis
UCD	University of California Davis
USDHHS-ATSDR	Agency for Toxic Substance and Disease Registry
USEPA	U.S. Environmental Protection Agency
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VOC	Volatile organic carbon
WDR	Waste Discharge Requirement
WER	Water Effect Ratio
WL	Watch List
WMI	Watershed Management Initiative
WQ	Water Quality
WQO	Water Quality Objective
WR	Water Rights
WRP	Water Reclamation Plant
WWTP	Waste Water Treatment Plant

Page left blank intentionally.

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

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

Volume I

Introduction

The State of California is required under Clean Water Act (CWA) section 303(d) and federal regulations (40 CFR 130) to prepare a list of and set priorities for water quality limited segments still requiring Total Maximum Daily Loads (TMDLs). The section 303(d) list was last revised in 1998. Federal regulations require the section 303(d) list to be updated every two years.

This Staff Report presents proposals for (1) revision of the State's section 303(d) list and recommendations for TMDL priorities; (2) development of an Enforceable Programs List; (3) development of a TMDLs Completed List; and (4) development of a Monitoring List.

Background

CWA section 303(d) requires states to identify waters that do not meet applicable water quality standards after the application of certain technology-based controls. As defined in CWA and federal regulations, water quality standards include the designated uses of a water body, the adopted water quality criteria, and the State's antidegradation policy. As defined in the Porter-Cologne Water Quality Control Act, water quality standards are beneficial uses to be made of a water body, the established water quality objectives (both narrative and numeric), and the State's nondegradation policy (SWRCB Resolution No. 68-16).

The section 303(d) list must include a description of the pollutants causing the violation of water quality standards (40 CFR 130.7(b)(iii)(4)) and a priority ranking of the water quality limited segments, taking into account the severity of the pollution and the uses to be made of the waters. A TMDL is the sum of the individual wasteload allocations for point sources, load allocations for nonpoint sources, and natural background, tributaries, or adjacent segments. Federal regulation defines a "water quality limited segment" as "any segment [of a water body] where it is known that water quality does not meet applicable water quality standards, and/or is not expected to meet applicable water quality

standards, even after application of technology-based effluent limitations required by CWA Sections 301(b) or 306."

States are required to review in even-numbered years the section 303(d) list, make changes as necessary, and submit the list to USEPA for approval. Federal regulation exempted the requirement for the list to be submitted in 2000, and extended the date for submission of the next section 303(d) list to October 1, 2002.

The State Water Resources Control Board (SWRCB) is in the process of developing a Water Quality Control Policy for guidance on the development of the CWA section 303(d) list of water quality limited segments. The Policy will address the solicitation of all readily available data and information, evaluation of the data and information, an approach to consider the weight of evidence for identifying water quality limited segments, listing and de-listing factors to determine attainment of standards or beneficial uses, priority setting, and other topics. Once developed, this policy will be used to develop all future section 303(d) lists.

Methodology Used to Develop the List

The SWRCB is required to provide U.S. Environmental Protection Agency (USEPA) a description of the methodology used to develop the section 303(d) list (40 CFR 130.7(b)(6)(i)). This section presents the SWRCB methodology for developing the 2002 section 303(d) list.

The SWRCB and RWQCB staff have evaluated each addition, deletion, and change to the section 303(d) based on all the data and information available for each water body and pollutant. These recommendations are based upon "all existing and readily available data and information" (40 CFR 130.7(b)(5)). In developing the recommendations, the SWRCB staff used the recommendations and analysis of the RWQCBs as the basis of its analysis. Each recommendation to the SWRCB is an independent assessment of each water body and pollutant. SWRCB staff took into account both general considerations (e.g., what factors the SWRCB should consider) and facts relating to individual water bodies and pollutants (e.g., how the RWQCBs looked at certain data or the significance of a particular water in the region).

Assumptions

In developing the SWRCB staff recommendations it was assumed that:

1. The 1998 section 303(d) list (Appendix) forms the basis for the 2002 list submittal.
2. Changes to existing listings would be considered by the SWRCB if a RWQCB recommended changes, if new data or information was available, or if existing data were reevaluated.

3. Portions of the USEPA 2002 Integrated Water Quality Monitoring and Assessment Report Guidance (USEPA, 2001) were used as follows:
 - A. If there is insufficient available data and information to list, water bodies were placed on a "Monitoring List."
 - B. If water quality standards are not met but the problem can be addressed now by another enforceable program, water bodies were placed on a "Enforceable Programs List."
 - C. If water quality standards are not met and a TMDL and implementation plan has been approved for the water body-pollutant combination, the water body-pollutant combination was placed on the "TMDLs Completed List."

Solicitation

Beginning March 14, 2001, the RWQCBs solicited other State agencies, Federal agencies, and the public for all readily available data and information to support the update of the section 303(d) list. The solicitation was first closed on May 15, 2001. On May 15, 2002, the SWRCB extended the solicitation of data and information until June 15, 2002.

RWQCB Analysis and Recommendations

The RWQCBs assembled and evaluated all existing and readily available water quality-related data and information to develop the list (40 CFR 130.7(b)(5)) and provided an assessment and documentation to list or not to list a state's waters (40 CFR 130.7(b)(6)). RWQCB staff prepared draft staff reports, fact sheets (in many cases), and summaries of the additions, deletions and changes to the section 303(d) list. Four RWQCBs prepared Watch Lists; one RWQCB described constituents/water bodies of potential concern.

RWQCB documents were made available for public comment. Each RWQCB held public Workshops and/or Board meetings to consider the recommendations for revising the section 303(d) list. Many of the RWQCBs received substantial public comments (including comments from USEPA), responded to the comments, and revised their reports/lists based on public comments or submitted data.

The RWQCBs assigned priorities of high, medium, or low for completion of TMDLs for the pollutants or stressors identified in their proposals for the section 303(d) list. Dates for completing the TMDLs were assigned.

Each of the RWQCBs submitted staff reports and lists to SWRCB, along with copies of public submittals, data and information, and documents referenced in the submittal. The information about the section 303(d) list was also entered into the Geospatial Water Body System (GeoWBS) by RWQCB and SWRCB staff.

SWRCB Review of RWQCB Recommendations

The SWRCB staff reviewed the RWQCB recommendations and either concurred with the recommendation or identified the reasons for not concurring. SWRCB staff developed fact sheets for each proposal to add water bodies, delete water bodies, and change the section 303(d) list. Fact sheets were not prepared for the waters that were recommended by the RWQCBs to be placed on the Monitoring List; however, the reasons for inclusion of the water on this list are presented. The data and information used to support the placement of these waters on the Monitoring List are described in the RWQCB staff reports and the administrative record.

Fact sheets were also prepared for many of the waters where (1) data and information were reviewed but no action was taken or (2) the listing was not changed even though pertinent data and information were submitted.

The administrative record and fact sheets contain the rationale for decisions to use or not to use any existing and readily available data and information (40 CFR 130.7(b)(6)(iii)). The SWRCB staff also identified and set priorities for the listed water quality limited segments still requiring TMDLs (40 CFR 130.7(b)).

SWRCB staff has reviewed each RWQCB proposal on a case-by-case basis. Staff identified and/or assessed the following factors for each water body-pollutant combination:

1. *Water Body*. The name of the water body or segment of a water body.
2. *Stressor (pollutant)/Medium/Beneficial Use*.

A description of:

Stressor or pollutant. The pollutant, stressor, or condition causing or contributing to the non-attainment of water quality standards.

Medium. The type of data available. Only three types were presented: Water, sediment, or tissue data.

Beneficial use. The beneficial use(s) addressed by the proposal.

3. *Assessment of data quality. Extent to which data quality requirements are met.*

In general, data supported by a Quality Assurance Project Plan (QAPP) pursuant to the requirements of 40 CFR 31.45 was acceptable for use in developing the section 303(d) list. In addition, the data from major monitoring programs in California were considered of adequate quality. The major programs include the State's new Surface Water Ambient Monitoring Program (SWAMP), Central Coast Ambient Monitoring Program (CCAMP), the Southern California Bight Projects of the Southern California Coastal Water Research Project, monitoring conducted by the U.S. Geological Survey, USEPA's Environmental Monitoring and Assessment Program, the Regional Monitoring Program of the San Francisco Estuary Institute, the Bay Protection and Toxic Cleanup Program (BPTCP), County Public Health Department, and National Pollutant Discharge Elimination System (NPDES) monitoring.

Data without rigorous quality control were also reviewed and were considered useful in some circumstances in combination with high quality data and information. If the data collection and analysis was not supported by a QAPP or if it was not possible to tell if the data collection and analysis was supported by a QAPP, then the data and information was not used by itself to support listing or de-listing of a water segment.

4. *Linkage between measurements and beneficial use or standard.*

This factor describes the extent to which the measurements are representative of, and correlated with, or applicable to beneficial uses and water quality standards. If there was no linkage between data measurements (e.g., a study that may have been performed for some other purpose) and the use or standard of interest, then that study and associated data were not used to evaluate the status of the stated beneficial use.

5. *Utility of measure for judging if standards or uses are not attained.*

This factor is related the ability to judge results of the study against well-accepted standards, criteria, guidelines, or other objective measures. Several recommendations are based on the RWQCB and SWRCB interpretation of narrative water quality objectives. This factor describes the applicability of the guideline used to interpret the sensitivity of a benchmark in determining if standards are met or beneficial uses are attained. Examples of measures used to interpret included: ambient water quality criteria, sediment quality criteria, sediment guidelines, maximum tissue residue levels (MTRLs), public health guidelines, bacterial standards, biological indices, and toxicity

or exposure thresholds recognized by the scientific or regulatory community as measures of environmental harm.

Guidelines that are well accepted and have high levels of certainty and applicability were used. Each of these evaluation guidelines had a strong scientific basis. Examples included: National Academy of Science (NAS) tissue guidelines, U.S. Food and Drug Administration (FDA) action levels, USEPA screening values, Maximum Contaminant Levels (MCLs); fish advisories; BPTCP approaches; published temperature thresholds; published sedimentation thresholds; Federal agency and other state sediment quality guidelines; Department of Health Services (DHS) bacterial standards; Department of Fish and Game (DFG) guidelines, Maximum Tissue Residue Levels (MTRLs), etc. Any adopted numerical water quality objectives or water quality criteria (i.e., the California Toxic Rule (CTR) or National Toxics Rule (NTR)) were considered of high quality.

Evaluation guidelines with no scientific basis for judging standards or beneficial use attainment were not used.

6. *Water Body-specific information.*

The age of the chemical and biological data and the environmental conditions at sites or in water bodies were taken into consideration (e.g., effects of seasonality, events such as storms, land use practices, etc.). Older data was considered in the assessments cautiously because older data may not represent current conditions in a water body.

7. *Data used to assess water quality.*

Some data, for purposes of developing the section 303(d) list, were sufficient by themselves to demonstrate standards attainment. Examples of these listing factors are: (1) numeric data exceeding numeric water quality objectives, maximum contaminant levels, or California/National Toxics Rule water quality criteria; and (2) use of numeric evaluation values focused on protection of consumption of aquatic species (e.g., MTRLs or U.S. FDA values).

Other data types required that multiple lines of evidence be used for listing and de-listing. The listing factors that required multiple lines of evidence were: (1) toxicity, (2) health advisories, (3) nuisance, (4) beach postings, (5) adverse biological response, and (5) degradation of aquatic life populations or communities. Each of these lines of evidence generally needed the pollutant(s) that caused or contributed to the adverse condition.

Numerical Data Evaluation. Data were evaluated on a case-by-case basis. The data evaluation was usually expressed as the number of samples exceeding the standard or guideline out of a total number of samples. When appropriate, the magnitude of measurements was also considered.

In general, judgements of standards attainment for numeric water quality standards or evaluation guidelines were based on allowable exceedance rate of no greater than 25 percent (USEPA, 1997) with moderate confidence that measurements from water bodies actually exceeded standards. In each case, the allowable exceedance rate was selected based on the expected parameter variability, measurement uncertainty, natural or study design variability, and the period measurements were collected.

Minimum Number of Samples. At present, the State's methodology does not set a minimum number of samples. In developing the recommendations, several RWQCBs selected a minimum number of samples depending on the parameter. Of course, large numbers of samples were always preferred in order to minimize false negative conclusions (not listing when in fact the water body should be listed). If standards were exceeded in a large percentage of the samples even if the total number of samples was low, the SWRCB staff accepted the higher possibility for false negative errors.

For measurements that integrate environmental conditions (like measurements of contaminants in fish tissue) at least two samples were usually sufficient. For other parameters that are more variable (such as dissolved oxygen, nutrient, or bacteria measurements) generally 10 samples were considered adequate; but there are several situations where fewer samples were sufficient and more samples were insufficient depending on the circumstances for the water body. In no case was a single sample or single sample exceedance used to place a water body on the section 303(d) list.

Bacterial Standards, Postings, and Closures. The approach for developing recommendations for the 2002 section 303(d) list related to bacterial standards exceedances, beach postings, and beach closures was developed as follows:

- Recommendations were based on frequency of water quality standards being exceeded.

Frequency of water quality standard exceedances was used and additional, site-specific information was considered when appropriate.

A beach was placed on the section 303(d) list when there was no other way to address the problem.

- Ideally, the frequency threshold for listing should be the number of water quality standard exceedances in a relatively unimpaired watershed. Since site-specific background data are not available, 10 percent of the total days exceeding standards per year was used as the threshold for listing. This value is based on studies of natural background conditions observed on some southern California beaches (Monitoring and Reporting Subcommittee of the Beach Water Quality Workgroup, personal communication). If sample collection was consistent over the sampling period, the number of samples exceeding standards was equivalent to the number of days exceeding the standard per year.

If water quality monitoring was only conducted during April 1 through October 31, four percent of the total samples was used as the threshold for listing (Noble et al., 1999).

- Permanent postings were counted as exceedances when they were based on site-specific water quality data. "Precautionary" postings were not counted as exceeding water quality standards.

The number of postings (the posting of warning signs on the beach by the local environmental health agency having jurisdiction) or the total number of days a beach is posted was not used in the assessment. Postings can result from a variety of administrative actions (e.g., permit conditions, precautionary postings, etc.) that are not related to standards being exceeded.

- "Rain Advisories" were considered in the same manner as precautionary postings. Site-specific data collected during storm events was used for listing determinations.
- Listing was based on sufficient samples to determine if the numeric standards were exceeded with moderate confidence.
- The length of beach to be listed was generally 50 yards on each side of the discharge point or, if no source was known, 50 yards on each side of the sampling location. Stations were either grouped into one listing or listed separately.
- It was preferred to assess bacterial data from multiple years.

These concepts were developed by the Monitoring and Reporting Subcommittee of the Beach Water Quality Workgroup (membership included staff of the SWRCB, several RWQCBs, several County public health departments, and other interested parties). While the

group has yet to submit its formal recommendations to the SWRCB on the contents of the Listing Policy, the approach presented here was discussed with the subcommittee and no objections were voiced regarding the use of the general approach in developing the 2002 proposed section 303(d) list.

8. *Spatial representation.*

This factor related to the degree of compatibility or overlap in the study area, locations of measurements or samples, locations of stressors or potential pollutant sources, and locations of potential exposure to pollutants.

9. *Temporal representation.*

This factor related to the temporal compatibility or overlap between the measurements (when data were collected or the period for which data are representative) and the period during which effects of concern would be likely to be detected. The number of measurements or sampling events over time and the expected variability over time were also considered.

10. *Data type.*

This factor related to the degree to which numbers can be used to describe the data measurement. This data characteristic also relates to whether results are objective or subjective.

11. *Use of standard method.*

This factor related to whether the data and information followed standard protocols recommended by recognized authorities. Examples of standard methods are study designs or chemical measures published in the Federal Register of the Code of Federal Regulations, developed by ASTM, NPDES monitoring, Public Health Department monitoring, or repeatedly published in the peer reviewed scientific literature, including impact assessments, field surveys, toxicity tests, benchmark approaches, toxicity quotients, and tissue residue analyses.

12. *Potential source of pollutant.*

The staff considered the presence of a pollutant, the potential pollutant, and pollution source.

13. Availability of an alternative enforceable program.

To determine which list to place the water body, the staff considered the existence of an alternate enforceable program that could address the problem. Many existing water quality control programs have the same goal as a TMDL: to reduce pollutant loadings to levels where water quality standards are met. These programs allow for the attainment of water quality standards before a TMDL is established or the programs are the mechanisms for implementing controls necessary to meet wasteload and load allocations that would be contained in a TMDL. Developing a TMDL in addition to the alternate program seems to be a duplication of effort and should be avoided whenever possible.

In order for a program to serve as a substitute for a TMDL it was necessary for the effort to be enforceable currently, funded, required, have a demonstrated record of voluntary compliance, or included in a basin plan, statewide plan, or water quality control policy. The program must also show demonstrated implementation of measures to correct the water quality problem (e.g., time schedules, cleanup and abatement orders, enforceable permit provisions, etc.).

Three alternate programs were considered in the development of the 2002 section 303(d) list:

Trash and Stormwater Permits. Trash impacts the aesthetics (and other uses) of many State waterways. Trash is thrown directly on beaches and into rivers and streams. Some trash enters waterways by blowing in from adjacent areas, but most trash enters these waterways via storm drains. Litter is intentionally or accidentally discarded in watersheds and during major storms, it is flushed through the storm drains into the rivers and streams.

If trash is a nuisance in water bodies of the State and storm drains are the major source, then existing stormwater permits could be used to reduce the trash discharged via storm drains.

Typically, the stormwater permits require the permittee to develop and implement a Storm Water Management Plan (SWMP) that is intended to reduce pollutant discharged in storm water to the Maximum Extent Practicable. The SWMP is intended to provide the framework for the development and implementation of specific program components, ranging from legal authority, funding, to Best Management Practice (BMP) programs. The stormwater permits require that standards be met, but the mechanism used to meet the standards is the use of ever evolving and more effective BMPs, which can include structural controls. All of the permit requirements are enforceable.

Water bodies were only placed on the Enforceable Programs List for trash if the existing permit provisions currently allow for the water quality standards to be met in a reasonable period of time. If multiple sources of trash (non-storm drain) are identified in a watershed, then the water body should be listed on the section 303(d) list and a TMDL developed. If provisions of a storm water permit do not address adequately trash problems now, water bodies were placed on the section 303(d) list.

Enforcement. For water quality improvement efforts that would, if implemented, allow attainment of water quality standards these efforts should be allowed to move forward in the absence of a TMDL. Several aspects of the State's Water Quality Program can be used to enforce water quality protection. These efforts include enforcement of existing authorities to correct permit or Waste Discharge Requirement (WDR) violations, spills, beach closures due to sewage spills, etc.

The RWQCBs have a variety of enforcement tools to use in response to non-compliance by dischargers. Formal enforcement actions are statutorily recognized actions to address a violation or threatened violation of water quality laws, regulations, policy, or orders. Some of the options available for enforcement: (1) Notices to Comply, (2) Cleanup and Abatement Orders (CAOs), (3) Time Schedule Orders, (4) Cease and Desist Orders (CDOs), and (5) Administrative Civil Liabilities (ACLs).

In addition, some NPDES permits can perform the same function as a TMDL and implementation plan. Section 303(d) of the Clean Water Act requires each state to identify those waters for which certain effluent limitations are not stringent enough to attain water quality standards. The term "not stringent enough" seems to refer to circumstances where the effluent limitations were not adequate or sufficient to attain standards. If those certain effluent limits alone, if implemented, would achieve water quality standards then section 303(d) exempts those waters from listing.

Water bodies were only placed on the Enforceable Programs List if the existing current permit provisions allow for the water quality standards to be met in a reasonable period of time. For those water bodies where point sources are the only cause of water quality standards not being attained, the applicable NPDES permit(s) should be used to achieve water quality standards in lieu of developing a TMDL.

Bay Protection and Toxic Cleanup Program (BPTCP). The Consolidated Toxic Hot Spot Cleanup Plan (SWRCB Resolution No. 99-065) developed in the BPTCP is a Water Quality Control

Policy that serves the same purpose as a TMDL and implementation plan.

The SWRCB and RWQCBs are required by the Water Code (section 13392) to: (1) identify and characterize toxic hot spots, (2) plan the cleanup or other appropriate remedial or mitigating action at the sites, and (3) prevent the creation of new toxic hot spots and the further pollution of existing hot spots (Water Code Section 13392). In 1999, the SWRCB adopted the Consolidated Toxic Hot Spots Cleanup Plan (SWRCB Resolution 99-065) that identified 22 high priority known toxic hot spots and completed the planning for the remediation of these sites. Three of the cleanup plans (for the Central Valley Region) were removed from the cleanup plan in 2001 as a result of a court order. These plans are being revised by the RWQCB and shall be considered for approval by the SWRCB.

Water Code section 13394 requires the SWRCB to develop a Consolidated Plan that identifies and ranks known toxic hot spots. The plan also presents descriptions of toxic hot spots, actions necessary to remediate sites, the benefits of remediation, and a range of remediation costs. The plan is applicable, in its entirety, to point and nonpoint source discharges to the waters of the State that can be reasonably determined by the RWQCBs to contribute to or cause the pollution at toxic hot spots.

The Consolidated Plan contains two volumes: Volume I contains the policy statements, definitions and criteria to rank sites, the list of known toxic hot spots, a summary of the actions planned for high priority known toxic hot spots, and findings; and Volume II contains the Regional Plans.

Each regional cleanup plan includes: (1) a priority listing of all toxic hot spots covered by the cleanup plan; (2) a description of each toxic hot spot including a characterization of the pollutants present at the site; (3) an assessment of the most likely source or sources of pollutants; (4) an estimate of the total costs to implement the cleanup plan; (5) an estimate of the costs that can be recovered from parties responsible for the discharge of pollutants; (6) a preliminary assessment of the actions required to remedy or restore a toxic hot spot; and (7) a two-year expenditure schedule identifying State funds needed to implement the cleanup plan.

The provisions of the Consolidated Plan are intended to establish principles and guidance to protect and improve the quality of the enclosed bays, estuaries and coastal waters of the State from discharges of hazardous substances in accordance with the provisions of Chapter 5.6 of the California Water Code.

If the potential discharger is identified, the RWQCBs are required to implement the remediation portions of the Consolidated Plan (Volume II) to the extent that responsible parties are identified and funds are available and allocated for implementation. The Consolidated Plan contains direction for reevaluation of waste discharge requirements to address the problems identified in the Plan.

The RWQCBs are directed to use their existing authorities to issue and revise waste discharge requirements (WDRs), issue and implement enforcement actions pursuant to existing policies, including but not limited to, the Water Quality Enforcement Policy and SWRCB Resolution No. 92-49 (as amended). The RWQCBs are directed to encourage potential dischargers to address known toxic hot spots through voluntary implementation of corrective actions.

In the absence of a potential discharger, the RWQCBs are directed to seek funding from available sources to remediate the site. The RWQCBs are required to evaluate as potential funding sources to remediate toxic hot spots. These include the following: Clean Water Act (CWA) section 319 Nonpoint Source Grants, CWA section 104(b) funds for wetland restoration, the State Revolving Funds Loan Program, the Agricultural Drainage Management Loan Program, the State Water Pollution Cleanup and Abatement Account (Cleanup and Abatement Fund), CALFED, Supplemental Environmental Projects, or mass-based permit offsets (or trading credits).

For each of these factors presented above, SWRCB staff prepared a written description of how the RWQCBs addressed the water body. Recommendations by the SWRCB staff were developed based on strength, value, and believability of all the data and information available. Staff considered all existing readily available data and information in making recommendations. SWRCB management reviewed the recommendations for additions to the list, deletions from the list, waters excluded from the list, waters to be placed on the various lists, and priorities.

In Volumes II and III of the Staff Report, the SWRCB staff have presented for each RWQCB: (1) water body fact sheets outlining the SWRCB evaluation of the available data and information, and (2) a reference listing of all the data and information used.

The SWRCB is required by the CWA and federal regulations to provide EPA the following information as part of the section 303(d) list:

- Water quality limited segments (40 CFR 130.7(b)(1))
- Pollutants (40 CFR 130.7(b)(4))

- Priority ranking (40 CFR 130.7(b)(4))
- Identification of waters targeted for TMDL development in the next two years (40 CFR 130.7(b)(4))

The SWRCB has also provided:

- Region
- Type of water body
- Calwater watershed (instead of hydrologic unit)
- Potential source(s) of pollutant, if known
- A preliminary estimate of the size (area or length) of water body affected

Please note: For the 1998 303(d) list, the “size affected” was an estimated value and many of the listings covered very large watersheds. Since 1998 there has been an ongoing effort by SWRCB and RWQCB staff to more clearly represent the affected size of all 303(d)-listed waters.

The “size affected” values for the 2002 section 303(d) list submittal have been changed to reflect the more precise measurements obtained from the GIS database (GeoWBS). Many of the size affected values on the proposed 2002 section 303(d) list differ from those on the 1998 section 303(d) list (Appendix). Therefore, due to our lack of understanding of the full impact of a pollutant until TMDLs are developed, the values for “size affected” may not reflect the true area of impact.

Many water bodies have been redefined into smaller or more clearly defined areas that better represent the watersheds and section 303(d) listings.

Setting Priorities and Schedules for Completing TMDLs

A priority ranking is required for listed waters to help guide TMDL planning (40 CFR 130.7(b)(4)). Federal regulations also require the state to identify waters targeted for TMDL development in the next two years. The schedule for TMDL development is based on the budgeted staff and contract resources available to the SWRCB and RWQCBs. TMDLs were ranked into high, medium, and low priority categories based on:

- Water body significance (such as importance and extent of beneficial uses, threatened and endangered species concerns, and size of water body).
- Degree that water quality standards are not met or beneficial uses are not attained or threatened (such as the severity of the pollution or number of pollutants/stressors of concern) (40 CFR 130.7(b)(4)).

- Availability of funding and information to address the water quality problem
- Overall need for an adequate pace of TMDL development for listed waters over the next two years.

High priority listings are targeted for TMDL completion in the next two years (by 2004). Medium and low priorities will be completed after 2004.

Public Participation Conducted by the SWRCB

The SWRCB held public hearings to receive comment on the proposed section 303(d) list. The first hearing was held in northern California (on May 23 and 24, 2002) and the second hearing was held in southern California (May 30, 2002). The SWRCB heard additional comments on the revised submittal at its November 2002 Workshop. The SWRCB received written submittals and testimony from 425 individuals and organizations. SWRCB staff has responded in writing to all comments received by December 6, 2002 (Volume IV). Changes were made to the staff report and recommendations as a result of the comments.

Additions, Deletions, and Changes to the Section 303(d) List

The basis for the 2002 section 303(d) list is the 1998 list (Appendix). The SWRCB staff proposes to add 130 water quality limited segments with an additional 284 pollutants or stressors to the section 303(d) list. The proposed 2002 section 303(d) list has a total of 681 water quality limited segments and 1,851 segment-pollutant combinations. The recommended additions and deletions are presented in Tables 1 and 2, respectively. Several changes to the listings are also proposed (Table 3).

Priorities and Schedules

In developing the 2002 section 303(d) submittal, the SWRCB staff reassessed the priorities established in the 1998 list. Based on budgeted resources currently available, the SWRCB staff proposes that TMDLs targeted for development be changed to the priorities and schedules presented in Table 4. Only waters with a priority of high or medium are presented in Table 4; all other waters, not presented in the table, are assigned a low priority. TMDLs are scheduled to be completed for high priority waters by 2004.

TMDLs Completed List

A number of TMDLs have been completed (Table 5). To show progress in developing TMDLs, the SWRCB staff proposes to create a list of TMDLs completed. For the purposes of this list, a completed TMDL includes a technical TMDL report; implementation plan; adoption by the RWQCBs; and approval by SWRCB, the Office of Administrative Law (OAL) and USEPA. Several TMDLs are in various stages of the

approval process. The TMDLs Completed List contains those water quality limited segments that have TMDLs with approved implementation plans.

At present, it is assumed that although the TMDL has been completed, the water quality standards or beneficial uses have not yet been attained. Once it has been shown that standards are achieved and/or beneficial uses are attained the pollutants will be removed from this list.

The TMDLs Completed List should not be considered part of the section 303(d) list. However, the TMDLs Completed List will be submitted to USEPA.

Enforceable Program List

Consistent with 40 CFR 130.7(b)(i), (ii), and (iii), water bodies are listed where the Consolidated Toxic Hot Spots Cleanup Plan and enforcement of existing permits or other legally required authorities are stringent enough to attain water quality standards. The programs and requirements are specifically applicable to the identified water quality problem. SWRCB staff proposes an Enforceable Program List that contains 48 segment-pollutant combinations (Table 6).

The Enforceable Program List is not part of the section 303(d) list but will be sent to USEPA.

Monitoring List

Many of the RWQCBs identified waters where minimal, contradictory, or anecdotal information suggests standards are not met but the available data or information is inadequate to draw a conclusion. In many cases, the data or information are not of adequate quality and/or quantity to support a listing and subsequent TMDL regulatory process. In these cases, a finding is warranted that more information must be collected to resolve whether objectives and beneficial uses are attained.

The waters on the Monitoring List are high priority for monitoring before the next section 303(d) list is completed. Allocations of resources should not be based on the Monitoring List because of the multiple functions of SWAMP. The Monitoring List should be used by the RWQCBs to, in priority order, obtain the needed monitoring (1) from responsible parties on a voluntary basis, (2) using Water Code section 13267 and 13225 authorities, and (3) as a last resort, using state funds identified for the site specific portion of SWAMP.

SWRCB staff proposes a Monitoring List that contains 312 water bodies (Table 7). The Monitoring List should not be considered part of the section 303(d) list; however, the list will be submitted to USEPA.

Changes in Presentation of the Water Bodies

Many water bodies have been redefined into smaller or more clearly defined areas that better represent the watersheds and section 303(d) listings. This redefinition added 96 new segment-pollutant combinations and 42 segments. These changes do not represent an increased number of listings but rather more specific identification of where water quality standards are not met. These changes in presentation are presented in Table 8.

Administrative Record

Copies of the SWRCB and RWQCB documents supporting the 2002 list submittal are posted on the SWRCB website at:

<http://www.swrcb.ca.gov/303dupdate.html>

The administrative record supporting the proposed 2002 section 303(d) list is housed in the Division of Water Quality, State Water Resources Control Board, 1001 I Street, 15th Floor, Sacramento, California. To make an appointment to review the record, please call (916) 341-5566.

References

Noble, Rachel T., Dorsey, J., Leecaster, M., Mazur, M., McGee, C., Moore, D., Victoria, O., Reid, D., Schiff, K., Vainik P., Weisberg, S. 1999. Southern California Bight 1998 Regional Monitoring Program, Vol I: Summer shoreline microbiology. Southern California Coastal Water Research Project, Westminster, CA.

U.S. Environmental Protection Agency. 1997. Guidelines for Preparation of the Comprehensive State Water Quality Assessments (305(b) Reports) and Electronic Updates. Assessment and Watershed Protection Division (4503F), Office of Wetlands, Oceans, and Watersheds, Office of Water.

U.S. Environmental Protection Agency. 2001. 2002 Integrated Water Quality Monitoring and Assessment Report Guidance. Office of Wetlands, Oceans and Watersheds.

Table 1: Proposed Additions to the Section 303(d) List

Region	Water Body	Pollutant/Stressor
1	Big River	Temperature
	Gualala River	Temperature
	Jacoby Creek	Sediment
	Laguna de Santa Rosa	Low Dissolved Oxygen Temperature
	Lake Mendocino	Mercury
	Lake Sonoma	Mercury
	Mad River	Temperature
	Redwood Creek	Temperature
	Russian River	Pathogens Temperature
	Santa Rosa Creek	Pathogens Temperature
	Stemple Creek/Estero de San Antonio	Sediment
	Ten Mile River	Temperature
	Tule Lake and the Lower Klamath National Wildlife Refuge	pH
2	Arroyo Las Positas	Diazinon
	Arroyo Mocho	Diazinon
	Central Basin, San Francisco	Mercury, PAHs
	Islais Creek	

Region	Water Body	Pollutant/Stressor
		PCBs, Chlordane, Dieldrin, Endosulfan sulfate, PAHs, anthropogenically enriched Hydrogen sulfide and Ammonia
	Marina Lagoon (San Mateo Co.)	High Coliform Count
	Mission Creek	Silver, Chromium, Copper, Mercury, Lead, Zinc, Chlordane, Chlorpyrifos, Dieldrin, Mirex, PCBs, PAHs, anthropogenically enriched Hydrogen sulfide and Ammonia
	Oakland Inner Harbor (Fruitvale site)	Chlordane, PCBs
	Oakland Inner Harbor (Pacific Dry-dock Yard 1 site)	Copper, Lead, Mercury, Zinc, TBT, ppDDE, PCBs, PAHs, Chlorpyrifos, Chlordane, Dieldrin, Mirex
	Pacific Ocean at Fitzgerald Marine Reserve	High Coliform Count
	Pacific Ocean at Pacifica State Beach (Linda Mar or San Pedro Beach)	High Coliform Count
	Pacific Ocean at Pillar Point Beach	High Coliform Count
	Pacific Ocean at Rockaway Beach	High Coliform Count
	Pacific Ocean at Venice Beach	High Coliform
	Petaluma River	Diazinon
	Petaluma River (tidal portion)	Nickel
	Pomponino Creek	High Coliform Count
	San Gregorio Creek	High Coliform Count
	San Leandro Bay	Mercury, Lead, Selenium, Zinc, PAHs, DDT, Pesticides
	San Pablo Reservoir	Mercury
	San Pedro Creek	High Coliform Count
	San Vicente Creek	High Coliform Count

Region	Water Body	Pollutant/Stressor
3	Alamo Creek	Fecal Coliform
	Alisal Creek (Salinas)	Fecal Coliform Nitrate
	Atascadero Creek (San Luis Obispo County)	Dissolved Oxygen Fecal Coliform
	Bean Creek	Sedimentation-Siltation
	Bear Creek (Santa Cruz County)	Sedimentation-Siltation
	Blosser Channel	Fecal Coliform
	Boulder Creek	Sedimentation-Siltation
	Bradley Canyon Creek	Fecal coliform
	Bradley Channel	Fecal Coliform
	Branciforte Creek	Sedimentation-Siltation
	Cholame Creek	Boron Fecal Coliform
	Chorro Creek	Fecal Coliform
	Chumash Creek	Fecal Coliform
	Corralitos Creek	Fecal Coliform
	Dairy Creek	Dissolved Oxygen Fecal Coliform
	Fall Creek	Sedimentation-Siltation
	Gabilan Creek	Fecal Coliform
	Kings Creek	Sedimentation-Siltation
	Llagas Creek	Chloride Fecal Coliform

Region	Water Body	Pollutant/Stressor
		pH Sodium TDS
	Los Osos Creek	Fecal Coliform
	Love Creek	Sedimentation-Siltation
	Main Street Canal	Nitrate
	Moro Cojo Slough	Dissolved Oxygen
	Mountain Charlie Gulch	Sedimentation-Siltation
	Newell Creek (Upper)	Sedimentation-Siltation
	Nipomo Creek	Fecal Coliform
	Old Salinas River Estuary	Dissolved Oxygen Fecal Coliform
	Orcutt Solomon Creek	Fecal Coliform Nitrate
	Oso Flaco Creek	Fecal Coliform Nitrate
	Oso Flaco Lake	Nitrate
	Pacific Ocean at Arroyo Burro (Santa Barbara County)	Total Coliform
	Pacific Ocean at Carpinteria State Beach- Carpinteria Creek Mouth (Santa Barbara County)	Fecal and Total Coliform
	Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)	Fecal Coliform Total Coliform
	Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)	Total Coliform
	Pacific Ocean at Gaviota Beach (Mouth of Canada de la Gaviota Creek)	Total Coliform
	Pacific Ocean at Hammonds Beach (Santa Barbara County)	

Region	Water Body	Pollutant/Stressor
		Fecal Coliform
	Pacific Ocean at Hope Ranch Beach (Santa Barbara County)	
		Fecal Coliform
	Pacific Ocean at Jalama Beach (Santa Barbara County)	
		Fecal Coliform Total Coliform
	Pacific Ocean at Ocean Beach (Santa Barbara County)	
		Total and Fecal Coliform
	Pacific Ocean at Point Rincon (Mouth of Rincon Creek, Santa Barbara County)	
		Fecal and Total Coliform
	Pacific Ocean at Refugio Beach (Santa Barbara County)	
		Total Coliform
	Pajaro River	
		Fecal Coliform
	Pennington Creek	
		Fecal Coliform
	Salinas Reclamation Canal	
		Dissolved Oxygen Fecal Coliform Nitrate
	Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 309.10 and 309.20)	
		Fecal Coliform
	Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)	
		Chloride Sodium
	San Benito River	
		Fecal Coliform
	San Bernardo Creek	
		Fecal Coliform
	San Lorenzo Creek	
		Boron Fecal Coliform
	San Luisito Creek	
		Fecal Coliform
	Santa Maria River	
		Fecal Coliform Nitrate
	Tembladero Slough	

Region	Water Body	Pollutant/Stressor
		Fecal Coliform
	Tequisquita Slough	Fecal Coliform
	Walters Creek	Fecal Coliform
	Warden Creek	Dissolved Oxygen Fecal Coliform
	Zayante Creek	Sedimentation-Siltation

4

Avalon Beach-between BB restaurant and Tuna Club	Bacterial Indicators
Avalon Beach-between Pier and BB restaurant (1/3)	Bacterial Indicators
Avalon Beach-between Pier and BB restaurant (2/3)	Bacterial Indicators
Avalon Beach-between storm drain and Pier (1/3)	Bacterial Indicators
Avalon Beach-between storm drain and Pier (2/3)	Bacterial Indicators
Ballona Creek	Dissolved Copper Dissolved Lead Dissolved Zinc pH Total Selenium
Calleguas Creek R9B (was part of Conejo Creek Reaches 1 and 2)	Fecal Coliform
Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo Creek Reach 2 and 3, and lower Conejo Creek/Arroyo Conejo North Fork on the 1998 303(d) list)	Chloride Fecal Coliform Nitrite as Nitrogen
Calleguas Creek Reach 11 (Arroyo Santa Rosa-was part of Conejo Creek Reach 3 on the 1998 303(d) list)	

Region	Water Body	Pollutant/Stressor
	Calleguas Creek Reach 13 - Conejo Creek (South Fork)-was Conejo Creek Reach 4 and part of Reach 3 on the 1998 303(d) list	Fecal Coliform
	Calleguas Creek Reach 2 (area affected is at the mouth)	Chloride
	Calleguas Creek Reach 2 (estuary to Potrero Road-was Calleguas Creek Reaches 1 and 2 on 1998 303(d) list)	Fecal Coliform
	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on the 1998 303(d) list)	DDT Dissolved Copper
	Calleguas Creek Reach 6 (was Arroyo Las Posas Reaches 1 and 2 on the 1998 303(d) list)	Fecal Coliform Nitrate as Nitrate
	Calleguas Creek Reach 7 (was Arroyo Simi Reach 1 and 2 on the 1998 303(d) list)	Fecal Coliform Nitrate as Nitrate (NO3)
	Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on the 1998 303(d) list)	Organophosphates
	Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on the 1998 303(d) list)	Fecal Coliform
	Calleguas Creek Reach 9A - Conejo Creek (South Fork)-was Conejo Creek Reach 4 and part of Reach 3 on the 1998 303(d) list	Fecal Coliform Nitrate as Nitrate (NO3) Nitrate as Nitrogen Nitrite as Nitrogen
		Chlordane Dieldrin Hexachlorocyclohexane PCBs

Region	Water Body	Pollutant/Stressor
	Calleguas Creek Watershed (Reaches 1-8, 11)	Sedimentation
	Canada Larga	Dissolved Oxygen Fecal Coliform
	Castlerock Beach	Bacterial Indicators
	Channel Islands Harbor-Beach Park at S. end of Victoria Avenue	Bacterial Indicators
	Coyote Creek	Dissolved Copper Dissolved Lead Dissolved Zinc Total Selenium
	Dry Canyon Creek	Fecal Coliform Total Selenium
	Hobie Beach (Channel Islands Harbor)	Bacterial Indicators
	Hopper Creek (tributary to Santa Clara River Reach 4)	Sulfate TDS
	Los Angeles Harbor-Consolidated Slip	Cadmium Copper Dieldrin Mercury Nickel Toxaphene
	Los Angeles River Estuary (Queensway Bay)	Chlordane DDT Lead PCBs Zinc
	Los Angeles River Reach 1 (Estuary to Carson Street)	Dissolved Cadmium Dissolved Copper Dissolved Zinc Total Aluminum
	Los Cerritos Channel	Chlordane

Region	Water Body	Pollutant/Stressor
	Malibu Creek Watershed [Malibu Creek, Las Virgenes Creek, Triunfo Creek (R1 and R2) and Medea Creek (R1 and R2)]	Sedimentation
	Malibu Lagoon	pH
	Marina del Rey Harbor-Back Basin	PCBs
	McCoy Canyon Creek	Fecal Coliform Nitrate Nitrate as Nitrogen Total Selenium
	McGrath Lake	Dieldrin Fecal Coliform PCBs
	Ormond Beach - J Street drain (50 yards south of drain)	Bacterial Indicators
	Ormond Beach - Oxnard Industrial drain (50 yards north of drain)	Bacterial Indicators
	Peninsula Beach (Beach area within two rock jetties)	Bacterial Indicators
	Piru Creek (Tributary to Santa Clara River Reach 4)	pH
	Pole Creek (tributary to Santa Clara River R3)	Sulfate TDS
	Promenade Park - Holiday Inn (south of drain at California Street)	Bacterial Indicators
	Promenade Park - Oak Street	Bacterial Indicators
	Promenade Park - Redwood Apartments	Bacterial Indicators
	Rincon Beach (150 yards south of creek mouth)	Bacterial Indicators
	Rincon Beach (at end of footpath)	Bacterial Indicators
	Rincon Beach-50 yards south of creek mouth	

Region	Water Body	Pollutant/Stressor
		Bacterial Indicators
	San Antonio Creek (Tributary to Ventura River Reach 4)	
		Total Nitrogen
	San Buenaventura Beach (Kalorama Street and Sanjon testing sites)	
		Bacterial Indicators
	San Buenaventura Beach (south of drain at San Jon Road)	
		Bacterial Indicators
	San Gabriel River, Reach 2	
		Dissolved Copper
		Dissolved Zinc
	Santa Clara River Reach 3	
		Total Dissolved Solids
	Sespe Creek (tributary to Santa Clara River Reach 3)	
		Chloride
		pH
	Surfer's Point at Seaside (End of access path via wooden gate)	
		Bacterial Indicators
	Ventura River Estuary	
		Fecal Coliform
		Total Coliform
	Wheeler Creek-Todd Barranca	
		Sulfate
		TDS

5

Arcade Creek	
	Copper
Avena Drain	
	Ammonia
	Pathogens
Bear Creek	
	Mercury
Bear River, Lower	
	Diazinon
Bear River, Upper	
	Mercury
Black Butte Reservoir	
	Mercury
Butte Slough	
	Diazinon
Calaveras River, Lower	
	Diazinon

Region	Water Body	Pollutant/Stressor
		Organic Enrichment-Low Dissolved Oxygen Pathogens
	Camp Far West Reservoir	Mercury
	Clover Creek	Fecal Coliform
	Colusa Basin Drain	Azinphos-methyl Diazinon Molinate
	Deer Creek (Yuba River)	pH
	Del Puerto Creek	Chlorpyrifos Diazinon
	Delta-Mendota Canal (DMC)	Selenium
	Don Pedro Lake	Mercury
	Englebright Lake	Mercury
	Five Mile Slough	Organic Enrichment-Low Dissolved Oxygen Pathogens
	Ingram/Hospital Creek	Chlorpyrifos Diazinon
	Jack Slough	Diazinon
	Lake Combie	Mercury
	Little Deer Creek	Mercury
	Mendota Pool	Selenium
	Middle River	Low Dissolved Oxygen
	Mormon Slough	Organic Enrichment-Low Dissolved Oxygen Pathogens
	Mosher Slough	Low Dissolved Oxygen Pathogens
	Newman Wasteway	

Region	Water Body	Pollutant/Stressor
		Chlorpyrifos Diazinon
	Oak Run Creek	Fecal Coliform
	Old River	Low Dissolved Oxygen
	Orestimba Creek	Azinphos-methyl DDE
	Putah Creek, Lower	Mercury
	Rollins Reservoir	Mercury
	San Joaquin River, Lower	Mercury
	Scotts Flat Reservoir	Mercury
	Smith Canal	Low Dissolved Oxygen Organophosphorus Pesticides Pathogens
	South Cow Creek	Fecal Coliform
	Stanislaus River, Lower	Mercury
	Stockton Deep Water Channel	Pathogens
	Sutter Bypass	Diazinon
	Walker Slough	Pathogens
	Wolf Creek	Fecal Coliform

6

Big Meadow Creek (Tributary to Lake Tahoe)	Pathogens
Blackwood Creek (Tributary to Lake Tahoe)	Iron (plant nutrient) Nitrogen Phosphorus
Buckeye Creek	Pathogens

Region	Water Body	Pollutant/Stressor
	Carson River, West Fork (headwaters to Woodfords) (was West Fork Carson River, Headwaters to Woodfords)	Nitrogen Percent sodium Phosphorus
	Carson River, West Fork (Woodfords to Paynesville) (was West Fork Carson River, Woodfords to Paynesville)	Nitrogen
	Carson River, West Fork (Woodfords to Paynesville, Paynesville to State Line) (was West Fork Carson River, Woodfords to Paynesville)	Percent sodium
	Carson River, West Fork (Woodfords to Paynesville, Paynesville to State Line) (was West Fork Carson River, Woodfords to State Line)	Pathogens
	East Walker River above Bridgeport Reservoir	Pathogens
	East Walker River below Bridgeport Reservoir	Nitrogen Phosphorus
	General Creek (Tributary to Lake Tahoe)	Iron (plant nutrient) Phosphorus
	Heavenly Valley Creek, source to USFS boundary (was Heavenly Valley Creek, within USFS boundary)	Phosphorus
	Heavenly Valley Creek, source to USFS boundary and USFS boundary to Trout Creek (was Heavenly Valley Creek)	Chloride
	Indian Creek	Pathogens
	Monitor Creek	Sulfate TDS
	Robinson Creek	Pathogens
	Swauger Creek	Pathogens

Region	Water Body	Pollutant/Stressor
	Tallac Creek (Tributary To Lake Tahoe)	Phosphorus
	Trout Creek (above Hwy 50, below Hwy 50) (was Trout Creek [above and below Hwy 50] [Tributary to Lake Tahoe])	Pathogens
	Trout Creek (above Hwy 50, below Hwy 50) (was Trout Creek [Tributary to Lake Tahoe])	Pathogens
	Truckee River, upper (above and below Christmas Valley) (was Upper Truckee River [Tributary to Lake Tahoe])	Iron (plant nutrient) Nitrogen Phosphorus
	Truckee River, upper (above Christmas Valley) (was Upper Truckee River [Tributary to Lake Tahoe])	Iron (plant nutrient) Phosphorus
	Ward Creek (Tributary to Lake Tahoe)	Pathogens
		Iron (plant nutrient) Nitrogen Phosphorus
7	New River	1,2,4-trimethylbenzene Chloroform Dissolved oxygen m,p,-Xylenes o-Xylenes p-Cymene p-DCB Toluene Trash
8	Buck Gully Creek	Total and Fecal coliform
	Huntington Beach at Magnolia Street	Enterococcus
	Los Trancos Creek	Total and Fecal coliform
	Orange County Coastline	Trash

Region	Water Body	Pollutant/Stressor
	San Diego Creek, Reach 1	Fecal coliform
	Seal Beach, Projection of First Street	Enterococcus
9	Agua Hedionda Creek	Total Dissolved Solids
	Aliso Creek	Enterococci Escherichia coli Fecal Coliform Phosphorus Toxicity (likely due to organophosphate pesticides)
	Cloverdale Creek	Phosphorus Total Dissolved Solids
	Dana Point Harbor (was Dana Point Harbor at Baby Beach [was "Dana Point Harbor"])	Bacterial Indicators (total/fecal coliform, enterococci)
	Felicita Creek	Total Dissolved Solids
	Forester Creek (was "Forrester Creek")	Fecal Coliform pH Total Dissolved Solids
	Green Valley Creek	Sulfate
	Hodges, Lake (was Lake Hodges [was Hodges Reservoir])	Color Nitrogen Phosphorus Total Dissolved Solids
	Kit Carson Creek	Total Dissolved Solids
	Murrieta Creek	Phosphorus
	Orange County Coastline	Trash
	Pacific Ocean Shoreline, Miramar Reservoir HA (was Pacific Ocean Shoreline, Torrey Pines State Beach at Los Penasquitos Lagoon outlet)	Bacterial Indicators

Region	Water Body	Pollutant/Stressor
	Pacific Ocean Shoreline, San Joaquin Hills HSA (was Pacific Ocean Shoreline, Laguna Beach and San Joaquin Hills [was Pacific Ocean, Laguna Beach HSA])	Bacterial Indicators
	Pine Valley Creek (Upper)	Enterococci
	Prima Deshecha Creek	Phosphorus Turbidity
	San Diego Bay Shoreline, between Sampson and 28th Streets	Copper Mercury Total PAHs Total PCBs Zinc
	San Diego Bay Shoreline, near Switzer Creek (was San Diego Bay at Mouth of Switzer Creek)	Chlordane, Lindane, PAHs
	San Diego Bay Shoreline, Shelter Island Shoreline Park (Pueblo San Diego 908.00 and Sweetwater)	Bacterial Indicators (was "high coliform count")
	San Diego Bay Shoreline, Tidelands Park	Bacterial Indicators (was "high coliform count")
	San Diego River (lower)	Dissolved Oxygen Fecal Coliform Phosphorus Total Dissolved Solids
	San Luis Rey River	Chloride Total Dissolved Solids
	Sandia Creek (was Sandia Canyon)	Total Dissolved Solids
	Santa Margarita River (Upper)	Phosphorus
	Segunda Deshecha Creek	Phosphorus Turbidity
	Sutherland Reservoir (was Lake Sutherland)	Color

Region	Water Body	Pollutant/Stressor
	Tijuana River Estuary	Dissolved Oxygen

Table 2: Proposed Deletions from the 1998 Section 303(d) List

Region	Water Body	Pollutant/Stressor	Recommendation
1			
	Garcia River	Sedimentation/Siltation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.
2			
	Arroyo Hondo	Diazinon	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because this body was listed as a mistake and never should have been listed as an Urban Creek.
	Carquinez Strait	Copper	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of natural sources, season, storm events, and age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard since 1997. The staff confidence that standards are not exceeded is high.</p> <p>The RWQCB recommends placing these San Francisco Bay segments in the on the Monitoring List for copper and nickel, due to the proximity of ambient levels to the water quality objectives, ongoing impairment at the mouth of the Petaluma River and pending commitments of dischargers to specific pollution prevention action plans. The SWRCB staff concurs.</p>

Region	Water Body	Pollutant/Stressor	Recommendation
		Nickel	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of natural sources, season, storm events, and age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard since March of 1993. The staff confidence that standards are not exceeded is high.</p> <p>The RWQCB recommends placing these San Francisco Bay segments in the on the Monitoring List for copper and nickel, due to the proximity of ambient levels to the water quality objectives, ongoing impairment at the mouth of the Petaluma River and pending commitments of dischargers to specific pollution prevention action plans. The SWRCB staff concurs.</p>
	Sacramento-San Joaquin Delta	Copper	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard since 1997. The staff confidence that standards are not exceeded is high.</p> <p>The RWQCB recommends placing these San Francisco Bay segments in the on the Monitoring List for copper and nickel, due to the proximity of ambient levels to the water quality objectives, ongoing impairment at the mouth of the Petaluma River and pending commitments of dischargers to specific pollution prevention action plans. The SWRCB staff concurs.</p>

Region	Water Body	Pollutant/Stressor	Recommendation
		Nickel	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard since March of 1993. The staff confidence that standards are not exceeded is high.</p> <p>The RWQCB recommends placing these San Francisco Bay segments in the on the Monitoring List for copper and nickel, due to the proximity of ambient levels to the water quality objectives, ongoing impairment at the mouth of the Petaluma River and pending commitments of dischargers to specific pollution prevention action plans. The SWRCB staff concurs.</p>
San Francisco Bay, Central		Copper	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard since 1997. The staff confidence that standards are not exceeded is high.</p> <p>The RWQCB recommends placing these San Francisco Bay segments in the on the Monitoring List for copper and nickel, due to the proximity of ambient levels to the water quality objectives, ongoing impairment at the mouth of the Petaluma River and pending commitments of dischargers to specific pollution prevention action plans. The SWRCB staff concurs.</p>

Region	Water Body	Pollutant/Stressor	Recommendation
	San Francisco Bay, Lower	Copper	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard since 1997. The staff confidence that standards are not exceeded is high.</p> <p>The RWQCB recommends placing these San Francisco Bay segments in the on the Monitoring List for copper and nickel, due to the proximity of ambient levels to the water quality objectives, ongoing impairment at the mouth of the Petaluma River and pending commitments of dischargers to specific pollution prevention action plans. The SWRCB staff concurs.</p>
		Nickel	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard since March of 1993. The staff confidence that standards are not exceeded is high.</p> <p>The RWQCB recommends placing these San Francisco Bay segments in the on the Monitoring List for copper and nickel, due to the proximity of ambient levels to the water quality objectives, ongoing impairment at the mouth of the Petaluma River and pending commitments of dischargers to specific pollution prevention action plans. The SWRCB staff concurs.</p>

Region	Water Body	Pollutant/Stressor	Recommendation
	San Francisco Bay, South	Copper	<p>The RWQCB adopted a site-specific objective (SSO) for copper in the San Francisco Bay this May. There RB staff have since clarified their rationale for de-listing copper in the Lower South San Francisco Bay (LSB). The modified rationale, based on water effect ratio (WER) information, shows that copper levels are below applicable thresholds of impairment in San Francisco Bay south of the Dumbarton Bridge. Available water effect ratio (WER) data support the RWQCB recommendation to de-list copper.</p> <p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>The staff confidence that standards are not exceeded is high.</p> <p>The RWQCB recommends placing these San Francisco Bay segments in the on the Monitoring List for copper and nickel, due to the proximity of ambient levels to the water quality objectives, ongoing impairment at the mouth of the Petaluma River and pending commitments of dischargers to specific pollution prevention action plans. The SWRCB staff concurs.</p>
		Nickel	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard since March of 1993. The staff confidence that standards are not exceeded is high.</p> <p>The RWQCB recommends placing these San Francisco Bay segments in the on the Monitoring List for copper and nickel, due to the proximity of ambient levels to the water quality objectives, ongoing impairment at the mouth of the Petaluma River and pending commitments of dischargers to specific pollution prevention action plans. The SWRCB staff concurs.</p>

Region	Water Body	Pollutant/Stressor	Recommendation
	San Pablo Bay	Copper	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard since 1997. The staff confidence that standards are not exceeded is high.</p> <p>The RWQCB recommends placing these San Francisco Bay segments in the on the Monitoring List for copper and nickel, due to the proximity of ambient levels to the water quality objectives, ongoing impairment at the mouth of the Petaluma River and pending commitments of dischargers to specific pollution prevention action plans. The SWRCB staff concurs.</p>
		Nickel	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard since March of 1993. The staff confidence that standards are not exceeded is high.</p> <p>The RWQCB recommends placing these San Francisco Bay segments in the on the Monitoring List for copper and nickel, due to the proximity of ambient levels to the water quality objectives, ongoing impairment at the mouth of the Petaluma River and pending commitments of dischargers to specific pollution prevention action plans. The SWRCB staff concurs.</p>

Region	Water Body	Pollutant/Stressor	Recommendation
	Suisun Bay	Copper	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard since 1997. The staff confidence that standards are not exceeded is high.</p> <p>The RWQCB recommends placing these San Francisco Bay segments in the on the Monitoring List for copper and nickel, due to the proximity of ambient levels to the water quality objectives, ongoing impairment at the mouth of the Petaluma River and pending commitments of dischargers to specific pollution prevention action plans. The SWRCB staff concurs.</p>
		Nickel	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard since March of 1993. The staff confidence that standards are not exceeded is high.</p> <p>The RWQCB recommend placing these San Francisco Bay segments in the on the Monitoring List for copper and nickel, due to the proximity of ambient levels to the water quality objectives, ongoing impairment at the mouth of the Petaluma River and pending commitments of dischargers to specific pollution prevention action plans. The SWRCB staff concurs.</p>

3

Chorro Creek

Metals

After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because data used in listing is insufficient. Data were not collected in Chorro Creek and do not represent the conditions in the creek.

Region	Water Body	Pollutant/Stressor	Recommendation
	Los Osos Creek	Priority organics	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded in sediment or water.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>
	San Lorenzo River Lagoon	Sediment-Siltation	<p>After reviewing the available information provided by the RWQCB and the recommendation, SWRCB staff concludes that the water body should be removed from the section 303(d) list because there was originally no information to support listing and currently there is no information available to assess if the problem due to a pollutant (upstream sediment sources).</p>
	Watsonville River	Metals (copper, zinc, lead)	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region	Water Body	Pollutant/Stressor	Recommendation
4	Watsonville Slough		
		Oil and Grease	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. The evaluation guideline used to interpret narrative water quality standards is adequate. 4. Data are numerical. 5. Standard methods were used. 6. Other water body- or site-specific information including the effects age of the data were considered. <p>All of the water quality measurements did not exceed the water quality standard. The staff confidence that standards were exceeded is moderate.</p>
4	Ballona Creek		
		Arsenic	After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because MTRL guidelines cannot be used for protection of aquatic life.
		Copper	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.
		Lead	In the review of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.
		Silver	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.
		TBT	After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because there is no valid assessment guideline for TBT in sediment.
		Trash	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.
	Ballona Creek Estuary		
		Aroclor	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be listed on the 2002 section 303(d) list for Aroclor because the water body is already listed for PCBs. Aroclor is another name for polychlorinated biphenyls (PCB). This would result in a duplicate water body listing for the same pollutant.

Region	Water Body	Pollutant/Stressor	Recommendation
	Ballona Creek Wetland	Arsenic	After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because there are no MTRL guidelines for arsenic.
	Calleguas Creek R9A, R9B, R10, R11, R12, R13 (was Conejo Creek R1, R2, R3, R4)	Cadmium	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.
	Calleguas Creek R9A, R9B, R10, R11 (was Conejo Creek R1, R2, R3, R4)	Chromium	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.
		Nickel	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.
		Silver	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.
	Calleguas Creek R9A, R9B, R10, R11, R13 (was Conejo Reach R1, R2, R3, R4)	Dacthal	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.
	Calleguas Creek Reach 1 (was Mugu Lagoon)	Dacthal	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because there are no guidelines for Dacthal and tissue samples are not linked to aquatic life protection.

Region	Water Body	Pollutant/Stressor	Recommendation
	Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)- was part of Conejo Creek Reach 2 and 3, and lower Conejo Creek/Arroyo Conejo North Fork on the 1998 303(d) list)	Organic Enrichment-Low Dissolved Oxygen	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, storm events, and age of the data were considered. <p>Most of the water quality measurements did not exceed the water quality standard. The staff confidence that standards were not exceeded is high.</p>
	Calleguas Creek Reach 11 (Arroyo Santa Rosa-was part of Conejo Creek Reach 3 on the 1998 303(d) list)	Organic Enrichment-Low Dissolved Oxygen	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, and age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region	Water Body	Pollutant/Stressor	Recommendation
	Calleguas Creek Reach 12 (was Conejo Creek/Arroyo Conejo North Fork on the 1998 303(d) list)	Organic Enrichment-Low Dissolved Oxygen	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements did not exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>
	Calleguas Creek Reach 13 - Conejo Creek (South Fork)-was Conejo Creek Reach 4 and part of Reach 3 on the 1998 303(d) list)	Organic Enrichment-Low Dissolved Oxygen	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements did not exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region	Water Body	Pollutant/Stressor	Recommendation
	Calleguas Creek Reach 2 (estuary to Potrero Road-was Calleguas Creek Reaches 1 and 2 on 1998 303(d) list)	Toxicity	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 7. Standard toxicity methods were used. 8. Other water body information including season and the age of the data were considered. <p>None of the water quality measurements exceeded the narrative objective. The staff confidence that the water quality objective were not exceeded is high.</p>
	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on the 1998 303(d) list)	Dacthal	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because approved valid guideline for Dacthal in sediment do not exist.</p>
	Calleguas Creek Reach 7 (was Arroyo Simi Reach 1 and 2 on the 1998 303(d) list)	Nickel	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.</p>
		Selenium	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.</p>
	Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on the 1998 303(d) list)	Chromium	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.</p>
		Silver	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.</p>

Region	Water Body	Pollutant/Stressor	Recommendation
		Zinc	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.
	Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on the 1998 303(d) list)	Toxicity	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded and the pollutant(s) potentially causing the toxicity were not identified.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- or site-specific information including the effects of natural sources, season, and age of the data were considered. <p>Most of toxicity tests did not exceed the water quality standard. Staff confidence that standards were not exceeded is moderate.</p>
	Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on the 1998 303(d) list)	Organic Enrichment-Low Dissolved Oxygen	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, and age of the data were considered. <p>Most of the water quality measurements did not exceed the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region	Water Body	Pollutant/Stressor	Recommendation
	Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2)	Organic Enrichment-Low Dissolved Oxygen	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of natural sources, season, storm events and age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. Staff confidence that standards are not exceeded high.</p>
	Colorado Lagoon	Lead	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret water quality standards.</p>
	Coyote Creek	Ammonia	<p>After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.</p>
		Silver	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are no longer a valid as a water quality standard assessment tool. In addition, MTRs are not linked to aquatic life beneficial uses.</p>
		Toxicity	<p>After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.</p>
	Echo Park Lake	Trash	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.</p>
	Lake Calabasas	Copper	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.</p>

Region	Water Body	Pollutant/Stressor	Recommendation
		Zinc	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.
	Lake Lindero	Selenium	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applied Median International Standards (MIS) are obsolete, not applicable within the U.S.A. and do not represent valid assessment guidelines to measure impacts on aquatic life beneficial uses.
	Lincoln Park Lake	Trash	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.
	Los Angeles Fish Harbor	TBT	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because the original listing was based on exceeding background levels rather than valid assessment guidelines.
	Los Angeles Harbor Inner Breakwater	TBT	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because the original listing was based on exceeding background levels rather than valid assessment guidelines.
	Los Angeles Harbor Main Channel	TBT	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because the original listing was based on exceeding background levels rather than valid assessment guidelines.
	Los Angeles Harbor-Consolidated Slip	TBT	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because the original listing was based on exceeding background levels rather than valid assessment guidelines.
		Zinc	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because the original listing was based on exceeding background levels rather than valid assessment guidelines.
	Los Angeles River Reach 1 (Estuary to Carson Street)	Trash	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region	Water Body	Pollutant/Stressor	Recommendation
	Los Angeles River Reach 2 (Carson to Figueroa Street)	Trash	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.
	Los Angeles River Reach 3 (Figueroa Street to Riverside Drive)	Trash	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.
	Los Angeles River Reach 4 (Sepulveda Drive to Sepulveda Dam)	Trash	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.
	Los Angeles River Reach 5 (At Sepulveda Basin)	Trash	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.
	Los Angeles River Reach 5 (within Sepulveda Basin)	Chem A	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because there is insufficient evidence to support listing the pollutant. The original listing was made in error by the RWQCB in 1996. The tissue sample collected in 1992 was below the NAS tissue guideline for Chem A.
		Chlorpyrifos	<p>This conclusion is based on the staff findings that the data exhibited insufficient spatial and temporal coverage.</p> <p>An adequate number of the water quality measurements did not exceed the water quality standard. The staff confidence that standards were exceeded is low.</p> <p>In the review of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.</p>

Region	Water Body	Pollutant/Stressor	Recommendation
	Malibou Lake	Chlordane	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the RWQCB provided recent data to that support water quality standards were not exceeded. The tissue sample collected in 1992 is now below the Chlordane MTRL guideline and chlordane was not detected in the 1997 tissue sample.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. The evaluation guideline used to interpret narrative water quality standards is adequate. 4. Data are numerical. 5. Standard methods were used. 8. Other water body information including age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is low.</p>
		Copper	<p>In the review of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.</p>
		PCB	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list. The RWQCB provided recent data to support removing this waterbody-pollutant from the 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. The evaluation guideline used to interpret narrative water quality standards is adequate. 4. Numerical data were presented. 5. Standard methods were used. <p>None of quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>
	Mandalay Beach	Beach Closures	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p>
	Marina del Rey Harbor-Back Basin	Copper	<p>In the review of the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.</p>

Region	Water Body	Pollutant/Stressor	Recommendation
McGrath Beach		DDT	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the list because the RWQCB presented data to support that water quality standards were not exceeded. Data was omitted in the RWQCB's original fact sheets.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. The evaluation guideline used to interpret narrative water quality standards is adequate.6. Data are numerical.7. Standard methods were used.8. Other water body information including age of the data were considered. <p>An inadequate of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>
		Lead	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.</p>
		TBT	<p>In the review of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.</p>
		Unknown	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because the information indicates that the benthic community infauna is moderately degraded.</p>
		Zinc	<p>In the review of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.</p>
		Beach Closures	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient temporal coverage.3. Beneficial uses apply to the water body.4. Water quality standard used is applicable.5. Other water body- or site-specific information including the age of the data were considered. <p>All of the water quality measurements did not exceed the beach closure guidelines in the last three years. Staff confidence that standards are not exceeded is moderate.</p>

Region	Water Body	Pollutant/Stressor	Recommendation
	McGrath Lake	Total Pesticides	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because chemicals can be listed individually.
	Peck Road Park Lake	Trash	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.
	Port Hueneme Harbor (back basins)	PAHs	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including the age of the data was considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>
		TBT	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because there was not a foundation for listing. The tissue measurements could not be evaluated. Assessment guidelines for TBT do not exist. A TBT level in sediment were low.
		Zinc	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because there was not a foundation for listing. The tissue measurements could not be evaluated. Assessment guidelines for zinc in tissue do not exist. Also zinc levels in sediment were low.
	Rio Hondo Reach 1	Ammonia	After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.
	Rio Hondo Reach 2	Ammonia	After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region	Water Body	Pollutant/Stressor	Recommendation
	San Gabriel River East Fork	Trash	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.
	San Gabriel River Estuary	Arsenic	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because MTRL for arsenic in tissue do not exist.
	San Gabriel River Reach 1	Ammonia	After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.
		Toxicity	After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.
	San Gabriel River Reach 2	Ammonia	After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.
	San Gabriel River Reach 3	Toxicity	After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.
	San Jose Creek Reach 1 (SG Confluence to Temple St.)	Ammonia	After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.
	San Jose Creek Reach 2 (Temple St. to I 10 at White Ave.)	Ammonia	After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region	Water Body	Pollutant/Stressor	Recommendation
	Santa Clara River Estuary Beach/Surfer's Knoll		
		Fecal Coliform	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. The Ocean Plan total coliform objective of samples exceeding 1000 MPN/100ml is met. 7. Standard methods were used. 8. Other water body specific information including the effects of season and age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>
		Total Coliform	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. The Ocean Plan total coliform objective of samples exceeding 1000 MPN/100ml is met. 6. Standard methods were used. 7. Other water body specific information including the effects of season and age of the data were considered. <p>An inadequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>
	Santa Clara River Reach 7		
		Ammonia	<p>After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.</p>
	Santa Clara River Reach 8		
		Ammonia	<p>After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.</p>

Region	Water Body	Pollutant/Stressor	Recommendation
		Nitrate-nitrogen plus Nitrite-nitrogen	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements did not exceed the water quality standard. The staff confidence that standards were not exceeded is high.</p>
		Organic Enrichment-Low Dissolved	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list and place on the Monitoring List because applicable water quality standards are not exceeded and the lack of QA/QC.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The dissolved oxygen data is considered to be of adequate quality. 2. The data exhibited insufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Other water body- or site-specific information including the effects of age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate. More information is needed because the available data may underestimate standards non-attainment.</p>
<hr/>			
	Santa Monica Bay Offshore/Nearshore	Chromium	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. The evaluation guideline used to interpret narrative water quality standards is adequate. 4. Data are numerical. 5. Standard methods were used. 6. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.</p>

Region	Water Body	Pollutant/Stressor	Recommendation
		Copper	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. The evaluation guideline used to interpret narrative water quality standards is adequate. 4. Data are numerical. 5. Standard methods were used. 6. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.</p>
		Lead	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. The evaluation guideline used to interpret narrative water quality standards is adequate. 4. Data are numerical. 5. Standard methods were used. 6. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.</p>
		Mercury	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. The evaluation guideline used to interpret narrative water quality standards is adequate. 4. Data are numerical. 5. Standard methods were used. 6. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.</p>

Region	Water Body	Pollutant/Stressor	Recommendation
		Nickel	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. The evaluation guideline used to interpret narrative water quality standards is adequate. 4. Data are numerical. 5. Standard methods were used. 6. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.</p>
		Silver	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. The evaluation guideline used to interpret narrative water quality standards is adequate. 4. Data are numerical. 5. Standard methods were used. 6. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.</p>
		Zinc	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. The evaluation guideline used to interpret narrative water quality standards is adequate. 4. Data are numerical. 5. Standard methods were used. 6. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.</p>
Ventura River Estuary		DDT	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded. In addition the original listing was based on one sample and concentrations of DDE was below the MTRLS.</p>

Region	Water Body	Pollutant/Stressor	Recommendation
	Ventura River Reach 1 (Estuary to Main Street) and R2 (Main Street to Weldon Canyon)	Copper	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.
		Selenium	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.
		Silver	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.
		Zinc	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.
	Westlake Lake	Chlordane	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the 303(d) list because applicable water quality standards are below the guideline. The RWQCB provided the appropriate data, that was inadvertently missing in their original fact sheet, to support the delisting of this water body-pollutant combination.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>
		Copper	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region	Water Body	Pollutant/Stressor	Recommendation
5			
	American River, Lower	Group A Pesticides	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>The new data show that the NAS and USFDA criteria are not being exceeded. The WQO for Group A pesticides for toxicity and pesticides are being attained and no longer needs to be listed on the 303(d) List for Group A Pesticide, WQO exceedance. Remove the entire length of the lower American River, Nimbus Dam to the Sacramento River attains WQO for Group A pesticides.</p>
	Sacramento River (Shasta Dam to Red Bluff)	Cadmium	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.
		Copper	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.
		Zinc	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.
	Salt Slough	Selenium	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region	Water Body	Pollutant/Stressor	Recommendation
	San Joaquin River, Merced River to the South Delta Boundary	Selenium	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.</p> <p>The San Joaquin River from Mud Slough to the confluence with the Merced River should continue to be listed as not attaining water quality standards for selenium. This reach is approximately 3 river miles long.</p>
6	Alkali Lake, upper	Salinity, TDS, Chlorides	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should be removed from the section 303(d) list because the source of impacts to water quality standards is entirely natural. Implementation of a TMDL is not appropriate.</p>
	Big Springs	Arsenic	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should be removed from the section 303(d) list because applicable water quality standards are exceeded but the source of the pollutant is entirely natural (i.e., volcanic).</p>
	Carson River, East Fork (was East Fork Carson River)	Nutrients	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should be removed from the section 303(d) list because of faulty data used in original listing, and because current data that shows that standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of inadequate quality. 2. The data exhibited insufficient spatial and temporal coverage. <p>An inadequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is extremely low.</p>
	Crowley Lake	Arsenic	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should be removed from the section 303(d) list because applicable water quality standards are exceeded but the source of the pollutant is entirely natural (volcanic).</p> <p>Beneficial use is drinking water supply for City of Los Angeles. Arsenic is removed from this water supply before delivery for use.</p>

Region	Water Body	Pollutant/Stressor	Recommendation
	East Walker River	Metals	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should be removed from the section 303(d) list because of faulty criteria used in original listing. Elevated Data Levels (EDLs) were used as a basis for concluding that water quality standards were not being met. This is inappropriate. EDLs are the 85th and 95th percentiles of all data collected, and are not appropriate guidelines.</p> <p>The staff confidence that standards were exceeded is extremely low.</p>
	Grant Lake	Arsenic	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should be removed from the section 303(d) list because applicable water quality standards are exceeded but the source of the pollutant is entirely natural.</p>
	Heavenly Valley Creek, source to USFS boundary (was Heavenly Valley Creek between USFS boundary and confluence with Trout Creek)	Sediment	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.</p>
	Hot Creek	Metals	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should be removed from the section 303(d) list because the sources are entirely natural.</p>
	Lower Alkali Lake	Salinity, TDS, Chlorides	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should be removed from the section 303(d) list because the sources of salinity, TDS and chlorides are natural.</p>
	Middle Alkali Lake	Salinity, TDS, Chlorides	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should be removed from the section 303(d) list because the sources of salinity, TDS and Chlorides are natural.</p>
	Mojave River	Priority Organics	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should be removed from the section 303(d) list because while pollutants were present in groundwater portion of this intermittent stream, listings are limited to surface waters.</p> <p>The staff confidence that surface water quality standards were exceeded is low. A TMDL is not applicable.</p>

Region	Water Body	Pollutant/Stressor	Recommendation
	Mono Lake	Salinity, TDS, Chlorides	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should be removed from the section 303(d) list and placed on the Enforceable Program List because while applicable water quality standards are exceeded, another program will address the problem. SWRCB Decision 1631 establishes conditions to control lake level and salt concentrations. Salt concentrations are not solely due to natural causes. Fifty years of water diversions caused a 45 foot drop in lake level, which caused increases in salt concentrations above those caused by natural sources. SWRCB Decision 1631 established a restored lake level of 6391 feet to meet water quality standards.
	Owens Lake	Salinity, TDS, Chlorides	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should be removed from the section 303(d) list because impairment is due to natural sources of salts and trace elements. Except for a few inches of water used to wet the dry lakebed to reduce particulate air pollution, no water remains. The Lake is not a drinking water supply.
	Owens River	Arsenic	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should be removed from the section 303(d) list because impairment is from natural causes. The beneficial use is drinking water supply for City of Los Angeles. Arsenic is removed from this water supply before delivery for use.
	Searles Lake	Salinity, TDS, Chlorides	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that Searles Lake should be removed from the section 303(d) list for salinity, TDS, and chlorides and placed on the Enforceable Program List because applicable water quality standards are exceeded but other programs will better address the problem.*</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established for the water body. 4. Standard methods were used. 5. Other water body- or site-specific information including the effects of natural sources and age of the data were considered. <p>An adequate amount of the measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p> <p>* A determination of whether or not this water body is a "water of the United States" will be made by the Regional Water Quality Control Board.</p>
	Snow Creek	Habitat Alterations	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should be removed from the section 303(d) list because although applicable water quality standards were exceeded, the problem is not due to a pollutant and another program addressed the problem--i.e., implementation of a wetland/riparian restoration program that included removal of fill material, restoration of the stream channel, revegetation, and installation of culverts to allow fish passage and reduce highway flooding.

Region	Water Body	Pollutant/Stressor	Recommendation
7	Stampede Reservoir	Pesticides (lindane)	Only one data point was available during 1989 listing. WQO for lindane is 2.5 ug/kg and original sample result was 2.6 ug/kg. Periodic re-sampling through Toxic Substances Monitoring Program should be done to confirm lack of impacts to water quality standards.
	Tinemaha Reservoir	Arsenic	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should be removed from the section 303(d) list because the source is entirely natural. The beneficial use is drinking water supply for City of Los Angeles. Arsenic is removed from this water supply before delivery for use.
	Top Spring	Radiation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should be removed from the section 303(d) list because the sources are entirely natural.
	Wendel Hot Springs, Amedee Hot Springs, Hot Creek, Fales Hot Springs, Little Hot Creek, Little Alkali Lake, Deep Springs Lake, Keogh Hot Springs, Amaragosa River	Salinity, metals, arsenic	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should be removed from the section 303(d) list because the source of impacts to water quality standards is natural. Basin Plan amendments for nine water bodies to remove the MUN use have been approved by SWRCB. A Use Attainability Analysis has been prepared by RWQCB.
	Alamo River	Sedimentation/Siltation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.
	New River	Bacteria	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.
		Volatile Organics/VOCs	Volatile Organics/VOCs should be removed from the section 303(d) list because several specific VOCs are proposed for the section 303(d) list.

Region	Water Body	Pollutant/Stressor	Recommendation
8	Newport Bay, Lower (was Lower Newport Bay)	Fecal coliform	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination.</p> <p>This conclusion is based on the staff findings that the TMDL has been completed, has been incorporated into Basin Plan, and has been approved by USEPA.</p>
		Nutrients	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination.</p> <p>This conclusion is based on the staff findings that the TMDL has been completed, has been incorporated into Basin Plan, and has been approved by USEPA.</p>
		Siltation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination.</p> <p>This conclusion is based on the staff findings that the TMDL has been completed, has been incorporated into Basin Plan, and has been approved by USEPA.</p>
	Newport Bay, Upper (was Upper Newport Bay)	Fecal coliform	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been incorporated into Basin Plan and has been approved by USEPA.</p>
		Nutrients	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been incorporated into Basin Plan and has been approved by USEPA.</p>
		Siltation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been incorporated into Basin Plan and has been approved by USEPA.</p>
	San Diego Creek, Reach 1	Nutrients	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been incorporated into Basin Plan and has been approved by USEPA.</p>

Region	Water Body	Pollutant/Stressor	Recommendation
San Diego Creek, Reach 2		Siltation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been incorporated into Basin Plan and has been approved by USEPA.
		Metals	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.
		Nutrients	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been incorporated into Basin Plan and has been approved by USEPA.
		Siltation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been incorporated into Basin Plan and has been approved by USEPA.
Santa Ana River, Reach 3		Nitrogen	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including age of the data were considered. <p>Most of the water quality measurements did not exceed the water quality standard. The staff confidence that standards were not exceeded is high.</p>
		Total Dissolved Solids	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including age of the data were considered. <p>Most of the water quality measurements did not exceed the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region	Water Body	Pollutant/Stressor	Recommendation
9	Pacific Ocean Shoreline, Coronado (Beach)	Bacterial Indicators (was "high coliform count")	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Water quality standard used is applicable. 4. Data are numerical. 5. Standard methods were used. 6. Other water body- or site-specific information including the effects of season and age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>
	San Diego Bay Shoreline, at Kellogg Street Beach (Pueblo San Diego HU [908.00] and Sweetwater HU [909.00])	Bacterial Indicators	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that this water body should not be specifically added to the section 303(d) list, and should be specifically de-listed from the 303(d) list, because applicable water quality standards are not exceeded a significant amount of the time. This determination is NOT meant to affect other San Diego Bay areas for bacterial indicators.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. However, 2. Too few samples exceeded the water quality objective. <p>The reason is that an inadequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is extremely low.</p> <p>Hydrologic Sub-area 908.10, the San Diego Shoreline at Point Loma, also encompasses the San Diego Bay Shoreline, at Kellogg Street Beach. Not specifically listing the San Diego Bay Shoreline, at Kellogg Street Beach is not intended to affect other waters in this sub-area, unless stated elsewhere.</p>

Table 3: Changes Proposed for the Existing Listings on the 1998 Section 303(d) List

Region	Water Body	Pollutant	Recommended Change
2			
	Lake Merritt	Trash	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body pollutant should be changed in this already listed water body, from Floating Material to Trash.
	Tomales Bay	Mercury	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body pollutant should be changed in this already listed water body. Change pollutant from Metals to Mercury.
	Walker Creek	Mercury	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body pollutant should be changed in this already listed water body. Change pollutant from metals to mercury.
5			
	Cache Creek, Lower	Mercury and Unknown Toxicity	Change in Total Size and Size Affected. The area extent is from Clear Lake Dam to Cache Creek Settling basin near the Yolo Bypass. RWQCB staff worked with SWRCB staff and this area was remapped. It was agreed that the new extent impacted is 96 miles.
	Camanche Reservoir	Copper	Change in listing to include reservoir on list separate from the river.
		Zinc	Change in listing to include reservoir on list separate from the river.
	Delta Waterways (Eastern Portion)	Chlorpyrifos, DDT, Diazinon, Group A pesticides, Mercury, Unknown Toxicity.	Change in Total Size and Size Affected. RWQCB staff worked with SWRCB staff and this area was remapped. It was agreed that the new extent impacted is 22,904 acres. A distinct "water only" eastern portion of the Delta has been created and the name has been revised to reflect this change.

Region	Water Body	Pollutant	Recommended Change
Delta Waterways (Stockton Ship Channel)			
		Low Dissolved Oxygen, Organic Enrichment	Change in Total Size and Size Affected. RWQCB staff worked with SWRCB staff and this area was remapped. It was agreed that the new extent impacted is 952 acres. A distinct "water only" Stockton Ship Channel portion of the Delta has been created and the name has been revised to reflect this change.
Delta Waterways (Western Portion)			
		Chlorpyrifos, DDT, Diazinon, Group A pesticides, Mercury, and EC , Unknown Toxicity.	Change in Total Size and Size Affected. RWQCB staff worked with SWRCB staff and this area was remapped. It was agreed that the new extent impacted for Electrical Conductivity is 22,904 acres. The extent impacted for the other pollutants was agreed to be 22,904 Acres. A distinct "water only" western portion of the Delta has been created and the name has been revised to reflect this change.
Dunn Creek			
		Mercury and Metals	Change in Total Size and Size Affected. RWQCB staff worked with SWRCB staff and this area was remapped. It was agreed that the new extent impacted is 0.7 miles. The extent is below Mt. Diablo Mine to Marsh Creek.
Fall River			
		Sedimentation and Siltation	Change in total size affected. RWQCB staff worked with SWRCB staff and this area was remapped. It was agreed that the new extent impacted is 9.5 miles.
Feather River, Lower			
		Diazinon, Group A pesticides, mercury, unknown toxicity	Change in total size affected. RWQCB staff worked with SWRCB staff and this area was remapped. It was agreed that the new extent impacted is 42 miles.
French Ravine			
		Bacteria	Change in total size affected. RWQCB staff worked with SWRCB staff and this area was remapped. It was agreed that the new extent impacted is 4 miles.
Harding Drain			
		Ammonia, chlorpyrifos, diazinon, unknown toxicity	Change in total size affected. RWQCB staff worked with SWRCB staff and this area was remapped. It was agreed that the new extent impacted is 8.3 miles.
Horse Creek			
		All metals (Cadmium, Copper, Lead, Zinc)	Change in size affected. RWQCB staff worked with SWRCB staff and this area was remapped. The extent is from Rising Star Mine to Shasta Lake. It was agreed that the new extent impacted is 0.52 miles.
Humbug Creek			
		Sedimentation and Siltation, Mercury, Copper, and Zinc.	Change in size affected. RWQCB staff worked with SWRCB staff and this area was remapped. It was agreed that the new extent impacted is 3 miles.

Region	Water Body	Pollutant	Recommended Change
	James Creek	Nickel and Mercury	Change in total size and size affected. RWQCB staff worked with SWRCB staff and this area was remapped. It was agreed that the new extent impacted is 8.5 miles. Total length is 9 miles.
	Keswick Reservoir	Cadmium, copper, zinc	Change in total size affected. RWQCB staff worked with SWRCB staff and this area was remapped. It was agreed that the new extent impacted is 135 acres.
	Kings River, Lower	Electrical conductivity, molybdenum, toxaphene	Change in total size affected. RWQCB staff worked with SWRCB staff and this area was remapped. It was agreed that the new extent impacted is 36 miles.
	Little Cow Creek	Cadmium, copper, zinc	Change in total size affected. RWQCB staff worked with SWRCB staff and this area was remapped. It was agreed that the new extent impacted is 1.1 miles.
	Lone Tree Creek	Ammonia, BOD, Electrical Conductivity	Change in total size affected. RWQCB staff worked with SWRCB staff and this area was remapped. It was agreed that the new extent impacted is 15 miles.
	Marsh Creek	Mercury	Change in Total Size and Size Affected. RWQCB staff worked with SWRCB staff and this area was remapped. This area was split into a ten mile section from Marsh Creek Reservoir to the San Joaquin River for mercury and metals and a second 11 mile section from Dunn Creek to Marsh Creek Reservoir for metals only. The new extent impacted for Marsh Creek Reservoir for mercury is 728 acres.
		Metals	Change in Total Size and Size Affected. RWQCB staff worked with SWRCB staff and this area was remapped. This area was split into a ten mile section from Marsh Creek Reservoir to the San Joaquin River for mercury and metals and a second 11 mile section from Dunn Creek to Marsh Creek Reservoir for metals only.
	Merced River, Lower	Chlorpyrifos, diazinon, Group A pesticides	Change in total size affected. RWQCB staff worked with SWRCB staff and this area was remapped. It was agreed that the new extent impacted is 50 miles.
	Mokelumne River, Lower	Copper	Change in areal extent.
		Zinc	Change in areal extent.

Region	Water Body	Pollutant	Recommended Change
	Mosher Slough	Diazinon and Chlorpyrifos	Change in Total size affected. RWQCB staff worked with SWRCB staff and this area was remapped. It was agreed to split Mosher Slough into a 1.3 mile section downstream of I-5 for chlorpyrifos, diazinon, organic enrichment/low dissolved oxygen impacts and a second 3.5 mile section upstream of I-5 for pathogen impacts.
	Natomas East Main Drainage Canal, Upper	Diazinon, PCBs	Change in total size affected. RWQCB staff worked with SWRCB staff and this area was remapped. It was split into 3.5 mile downstream and 12 mile upstream sections.
	Panoche Creek	Mercury, sedimentation/siltation, selenium	Change in total size affected. RWQCB staff worked with SWRCB staff and this area was remapped. It was agreed that the new extent impacted is 18 miles.
	Sacramento River (Red Bluff to Delta)	Diazinon, mercury, unknown toxicity	Change in total size affected. RWQCB staff worked with SWRCB staff and this area was remapped. It was split into two sections, an 82 mile section and a second 16 mile section.
	Sacramento River (Shasta Dam to Red Bluff)	Unknown toxicity	Change in total size affected. RWQCB staff worked with SWRCB staff and this area was remapped. It was split into two sections, a 15 mile section and a second 16 mile section.
	Salt Slough	Boron, chlorpyrifos, diazinon, Electrical Conductivity, unknown toxicity	Change in total size affected. RWQCB staff worked with SWRCB staff and this area was remapped. It was agreed that the new extent impacted is 17miles.
	San Carlos Creek	Mercury	Change in Total Size and Size Affected and add "Acid Mine Drainage" as a pollutant source. RWQCB staff worked with SWRCB staff and this area was remapped. It was agreed that the new extent impacted is 5.1 miles. The impaired extent is downstream from the New Idria Mine. The mapped impacted extent was changed from 8.5 miles to 5.1 miles. Acid mine drainage has been added to the pollutant source, along with Resource Extraction.
	Shasta Lake	Cadmium, copper, zinc	Change in total size affected. RWQCB staff worked with SWRCB staff and this area was remapped. It was agreed that the new extent impacted is 20 acres.
	Spring Creek, Lower	Acid mine drainage, cadmium, copper, zinc	Change in total size affected. RWQCB staff worked with SWRCB staff and this area was remapped. The impaired extent is from Iron Mountain Mine to Keswick Reservoir.

Region	Water Body	Pollutant	Recommended Change
	Stanislaus River, Lower	Diazinon, Group A Pesticides, Unknown toxicity	Change in Total Size and Size Affected.
	Sulphur Creek	Mercury	Change in total size affected. RWQCB staff worked with SWRCB staff and this area was remapped. The extent of the impacted area is 14 miles.
	Tuolumne River, Lower	Diazinon Group A Pesticides, Unknown Toxicity	Change in Total Size and Size Affected. The impaired extent is from Don Pedro Reservoir to the San Joaquin River. Change in Total Size and Size Affected. The impaired extent is from Don Pedro Reservoir to the San Joaquin River.
	West Squaw Creek, Upper and Lower	Cadmium, copper, lead, and zinc	Change in total size affected. RWQCB staff worked with SWRCB staff and this area was remapped. The extent of the impacted area is 2.0 miles.
	Whiskeytown Reservoir	High coliform count	Change in total size affected. RWQCB staff worked with SWRCB staff and this area was remapped. The extent of the impacted area is 98 acres.
	Willow Creek (Shasta County)	Acid mine drainage, copper, zinc	Change in total size affected. RWQCB staff worked with SWRCB staff and this area was remapped. "Whiskeytown" was deleted and Shasta County was added to better reflect the location of the creek. The waterbody now is shown as Willow Creek (Shasta County). The extent of the impacted area is 4.0 miles.

6

	Bridgeport Reservoir, Crowley Lake, Lake Tahoe	Nitrogen, Phosphorus	Clarify previous listings for nutrients. Replace nutrient listings with separate listings for nitrogen and phosphorus.
	Eagle Lake	Nitrogen, Phosphorus (was Low Dissolved Oxygen)	Clarify by changing listing from low dissolved oxygen to separate listings for nitrogen and phosphorus.
	Haiwee Reservoir	Copper	The comment below will be added to the list and fact sheet indicating, where relevant, that the question of whether Haiwee Reservoir, a water-quality-limited segment, is a water of the United States was raised, but that listing is not a determination of that question. * A determination of whether or not this water body is a "water of the United States" will be made by the Regional Water Quality Control Board.

Region	Water Body	Pollutant	Recommended Change
7	Monitor Creek		
		Iron, silver, aluminum, manganese (was "metals")	Clarify metals listing. Replace metals listing with listings for 4 specific metals - iron, silver, aluminum, manganese.
	Coachella Valley Stormwater Channel		
		Pathogens (was bacteria)	Change pollutant description and source, and Alternative program description in Fact Sheet.
9	Palo Verde Outfall Drain		
		Pathogens (was bacteria)	Change pollutant description and source, and Alternative program description in Fact Sheet.
	Agua Hedionda Lagoon		
		Bacterial Indicators (was "high coliform count")	Change pollutant designation from "high coliform count" to "Bacterial Indicators."
	Aliso Creek (mouth) (was Aliso Creek Mouth of Orange)		
		Bacterial Indicators (was "high coliform count")	Change pollutant designation from "high coliform count" to "bacterial indicators."
	Buena Vista Lagoon		
		Bacterial Indicators (was "high coliform count")	Change pollutant designation from "high coliform count" to "Bacterial indicators."
	Chollas Creek		
		Bacterial Indicators (was "high coliform count")	Change pollutant designation from "high coliform count" to "Bacterial indicators."

Region	Water Body	Pollutant	Recommended Change
	Dana Point Harbor (was Dana Point Harbor at Baby Beach [was "Dana Point Harbor"])	Bacterial Indicators (total/fecal coliform, enterococci)	<p>A. After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that this water body should be added (as recommended by the RWQCB) to the section 303(d) list because applicable water quality standards are exceeded a significant amount of the time.</p> <p>The reason is that an adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established for and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- or site-specific information including the effects of natural sources, season, storm events, and age of the data were considered. <p>B. Change name (to agree with RWQCB staff's "Table 4" entry for hydrologic descriptor 901.14.</p>
	Forester Creek (was "Forrester Creek")	Fecal Coliform	<p>A. After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established for and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of season, storm events, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p> <p>B. Change name from "Forrester" to "Forester Creek" (correct spelling).</p>

Region	Water Body	Pollutant	Recommended Change
	Loma Alta Slough	Bacterial Indicators (was "high coliform count")	Change pollutant designation from "high coliform count" to "Bacterial indicators."
	Mission Bay Shoreline (was Mission Bay, at Rose Creek Mouth and Tecolote Creek Mouth)	Eutrophic (no change), Lead (no change), Bacterial Indicators (was high coliform count)	A. Change name from "Mission Bay" to "Mission Bay, at Rose Creek Mouth and Tecolote Creek Mouth." B. Change pollutant designation from "high coliform count" to "bacterial indicators."
	Pacific Ocean Shoreline, Aliso HSA (was Pacific Ocean, Aliso HSA 901.13)	Bacterial Indicators (was "high coliform count").	Change pollutant designation from "high coliform count" to "Bacterial indicators."
	Pacific Ocean Shoreline, Buena Vista (Creek) HA (was Pacific Ocean, Buena Vista HA 901.20)	Bacterial Indicators (was "high coliform count")	Change pollutant designation from "high coliform count" to "Bacterial indicators."
	Pacific Ocean Shoreline, Dana Point HSA (was Pacific Ocean, Dana Point HSA 901.14)	Bacterial Indicators (was "high coliform count")	Change pollutant designation from "high coliform count" to "Bacterial indicators."
	Pacific Ocean Shoreline, Escondido Creek HSA (was Pacific Ocean, Escondido HSA 904.60)	Bacterial Indicators (was "high coliform count")	Change pollutant designation from "high coliform count" to "Bacterial indicators."
	Pacific Ocean Shoreline, Laguna Beach HSA (was Pacific Ocean Shoreline, Laguna Beach and San Joaquin Hills [was Pacific Ocean, Laguna Beach HSA])	Bacterial Indicators (originally high coliform count)	A. Rename water body from "Pacific Ocean, Laguna Beach HSA" and "Pacific Ocean Shoreline, Laguna Beach and San Joaquin Hills" to "Pacific Ocean Shoreline, Laguna Beach HSA." B. Change "pollutant" designation from "high coliform count" to "Bacterial Indicators."
	Pacific Ocean Shoreline, Loma Alta HA (was Pacific Ocean, Loma Alta HSA 904.10)	Bacterial Indicators (was "high coliform count")	Change pollutant designation from "high coliform count" to "Bacterial indicators."
	Pacific Ocean Shoreline, Lower San Juan HSA (was Pacific Ocean, Lower San Juan HSA)	Bacterial Indicators (was "high coliform count")	Change pollutant designation from "high coliform count" to "Bacterial indicators."
	Pacific Ocean Shoreline, San Clemente HA (was Pacific Ocean Shoreline, San Clemente, San Mateo Canyon, and San Onofre [was "Pacific Ocean, San Clemente HA 901.30"])	Bacterial Indicators (originally high coliform count)	A. Rename water body from "Pacific Ocean, San Clemente HA 901.30" to "Pacific Ocean Shoreline, San Clemente, San Mateo Canyon, and San Onofre." B. Change "pollutant" designation from "high coliform count" to "bacterial indicators."

Region	Water Body	Pollutant	Recommended Change
	Pacific Ocean Shoreline, San Diego HU (was Pacific Ocean, San Diego HU 907.00)	Bacterial Indicators (was "high coliform count")	Change pollutant designation from "high coliform count" to "Bacterial indicators."
	Pacific Ocean Shoreline, San Dieguito HU (was Pacific Ocean, San Dieguito HU 905.00)	Bacterial Indicators (was "high coliform count")	Change pollutant designation from "high coliform count" to "Bacterial indicators."
	Pacific Ocean Shoreline, San Luis Rey HU (was Pacific Ocean, San Luis Rey HU 903.00)	Bacterial Indicators (was "high coliform count")	Change pollutant designation from "high coliform count" to "Bacterial indicators."
	Pacific Ocean Shoreline, San Marcos HA (was Pacific Ocean, San Marcos HA 904.50)	Bacterial Indicators (was "high coliform count")	Change pollutant designation from "high coliform count" to "Bacterial indicators."
	Pacific Ocean Shoreline, Scripps HA (was Pacific Ocean, Scripps HA 906.30)	Bacterial Indicators (was "high coliform count")	Change pollutant designation from "high coliform count" to "Bacterial indicators."
	Pacific Ocean Shoreline, Tijuana HU (was Pacific Ocean, Tijuana HU 911.00)	Bacterial Indicators (was "high coliform count")	Change pollutant designation from "high coliform count" to "Bacterial indicators."
	Rainbow Creek	Nitrate, Phosphorus (was "eutrophic")	<p>Change pollutant designation from "eutrophic" to "nitrate" and "phosphorus." After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should remain on the section 303(d) list under the new pollutant designations--"Nitrate" and "phosphorus"--because applicable water quality standards are exceeded and pollutants contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established for and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of natural sources, season, storm events, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region	Water Body	Pollutant	Recommended Change
	San Diego Bay Shoreline, 32nd St San Diego Naval Station (was San Diego Bay, San Diego Naval Station)		
		Benthic Community Effects, Sediment Toxicity	Per RWQCB recommendation, revise name of existing, 1998, listing. This is not a new listing (but does identify specific location within larger, general 1998 listing for all of San Diego Bay).
	San Diego Bay Shoreline, Chula Vista Marina (was San Diego Bay Shoreline, Telegraph HSA 909.11)		
		Bacterial Indicators (was "high coliform count")	Per RWQCB recommendation, (A) revise name, and (B) change pollutant to "bacterial indicators." This is not a new listing.
	San Diego Bay Shoreline, Downtown Anchorage (was San Diego Bay, Downtown Anchorage [was "San Diego Bay, near grape Street"])		
		Benthic Community Effects, Sediment Toxicity	Change name from "San Diego Bay, near Grape Street" to "San Diego Bay Shoreline, Downtown Anchorage."
	San Diego Bay Shoreline, G Street Pier (was, in part, San Diego Bay Shoreline, Lindbergh HSA 908.21.)		
		Bacterial Indicators (was "high coliform count")	A. The original 1998 listing was titled "San Diego Bay, Lindbergh HSA 908.21." However, not all of that water body is impacted by pollution. For 2002, the RWQCB recommended that 1998 titles be refined to identify those water body segments specifically affected by pollution. For example, the Lindbergh HSA includes the "San Diego Bay Shoreline, G Street Pier" area. (Other segments, such as "San Diego Bay Shoreline, vicinity of B Street and Broadway Piers," have been identified separately.) This is not a new listing. The original pollution-impacted segments, that were included within the Lindbergh listing, remain on the list, albeit with new, more specific titles. B. Change pollutant designation from "high coliform count" to "Bacterial indicators."
	San Diego Bay Shoreline, near Chollas Creek (was San Diego Bay, near Chollas Creek)		
		Benthic Community Effects, Sediment Toxicity	Per RWQCB recommendation, revise name of existing, 1998, listing. This is not a new listing (but does identify specific location within larger, general 1998 listing for all of San Diego Bay).
	San Diego Bay Shoreline, near Coronado Bridge (was San Diego Bay, near Coronado Bridge)		
		Benthic Community Effects, Sediment Toxicity	Per RWQCB recommendation, revise name of existing, 1998, listing. This is not a new listing (but does identify specific location within larger, general 1998 listing for all of San Diego Bay).

Region	Water Body	Pollutant	Recommended Change
	San Diego Bay Shoreline, near Crosby Street (Cesar Chavez) Park (will become part of the "San Diego Bay Shoreline, near Coronado Bridge" listing)	Sediment Toxicity	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should be included within an already (1998) listed water body on the section 303(d) list because the evidence suggests that water quality standards are not being achieved and protected at the site.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. Beneficial uses have been established for and apply to the water body. 2. Water quality standard used is applicable. 3. Other water body- or site-specific information including the effects of season, and age of the data were considered. <p>The beneficial uses at the site exist and are of such importance as to justify including this water body within the area covered by the San Diego Bay Shoreline, Coronado Bridge listing. The confidence SWRCB staff have that beneficial uses at the site are being harmed is moderate.</p>
	San Diego Bay Shoreline, near Sub Base (was San Diego Bay, near Sub Base)	Benthic Community Effects, Sediment Toxicity	Per RWQCB recommendation, revise name of existing 1998 listing. This is not a new listing (but does identify specific location within larger, general 1998 listing for all of San Diego Bay).
	San Diego Bay Shoreline, north of 24th Street Marine Terminal (was San Diego Bay, north of 24th Street Marine Terminal)	Benthic Community Effects, Sediment Toxicity	Per RWQCB recommendation, revise name of existing 1998 listing. This is not a new listing (but does identify specific location within larger, general 1998 listing for all of San Diego Bay).
	San Diego Bay Shoreline, Seventh Street Channel (was San Diego Bay, Seventh Street Channel)	Benthic Community Effects, Sediment Toxicity	Per RWQCB recommendation, revise name of existing 1998 listing. This is not a new listing (but does identify specific location within larger, general 1998 listing for all of San Diego Bay).
	San Diego Bay Shoreline, Vicinity of B Street and Broadway Piers (was San Diego Bay, Vicinity of B Street and Broadway Piers [was "San Diego Bay, Downtown Piers 10 acres"])	Benthic Community Effects, Sediment Toxicity (no change)	Change existing ('98) water body name from "San Diego Bay, Downtown Piers 10 acres" to "San Diego Bay, Vicinity of B Street and Broadway Piers."
	San Elijo Lagoon	Bacterial Indicators (was "high coliform count")	Change pollutant designation from "high coliform count" to "Bacterial indicators."

Region	Water Body	Pollutant	Recommended Change
	San Juan Creek	Bacterial Indicators (was "high coliform count")	Change pollutant designation from "high coliform count" to "Bacterial indicators."
	San Juan Creek (mouth)	Bacterial Indicators (was "high coliform count")	Change pollutant designation from "high coliform count" to "Bacterial indicators."
	Tecolote Creek	Bacterial Indicators (was "high coliform count")	Change pollutant designation from "high coliform count" to "Bacterial indicators."
	Tijuana River	Bacterial Indicators (was "high coliform count")	Change pollutant designation from "high coliform count" to "Bacterial indicators."
	Tijuana River Estuary	Bacterial Indicators (was "high coliform count")	Change pollutant designation from "high coliform count" to "Bacterial indicators."

**Table 4: Proposed TMDL Priorities
and Completion Dates for the 2002
Section 303(d) List**

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
I	Albion River	Sedimentation/Siltation	High	2003
	Big River	Sedimentation/Siltation	High	2003
	Eel River Delta	Sedimentation/Siltation Temperature	Medium Medium	
	Eel River, Middle Fork	Sedimentation/Siltation Temperature	Medium Medium	
	Eel River, Middle Main	Sedimentation/Siltation Temperature	Medium Medium	
	Eel River, North Fork	Sedimentation/Siltation Temperature	Medium Medium	
	Eel River, South Fork	Sedimentation/Siltation Temperature	Medium Medium	
	Eel River, Upper Main (Includes Tomki Creek)	Sedimentation/Siltation Temperature	Medium Medium	
	Elk River	Sedimentation/Siltation	High	2003
	Estero Americana, Bodega HU, Estero Americana HA	Nutrients	Medium	
	Freshwater Creek	Sedimentation/Siltation	High	2003
	Garcia River	Sedimentation/Siltation	High	2002
	Gualala River	Sedimentation/Siltation	High	2004
	Klamath River HU, Lost River HA, Clear Lake HSA, Boles HSA	Nutrients Temperature	Medium Medium	

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
	Klamath River HU, Lost River HA, Tule Lake HSA, Mt. Dome HSA	Nutrients	Medium	
		Temperature	Medium	
	Klamath River HU, Lower HA, Klamath Glen HSA	Nutrients	Medium	
		Organic enrichment/Low D.O.	Medium	
		Temperature	Medium	
	Klamath River HU, Middle HA, Scott River to Trinity River	Nutrients	Medium	
		Organic enrichment/Low D.O.	Medium	
		Temperature	Medium	
	Klamath River HU, Middle HA, Iron Gate Dam to Scott River	Nutrients	Medium	
		Organic Enrichment /Low Dissolved Oxygen	Medium	
		Temperature	Medium	
	Klamath River HU, Middle HA, Oregon to Iron Gate Dam	Nutrients	Medium	
		Organic enrichment/Low D.O.	Medium	
		Temperature	Medium	
	Klamath River HU, Salmon River HA	Nutrients	High	2004
		Temperature	High	2004
	Klamath River, Klamath River HU, Butte Valley HA	Nutrients	Medium	
		Temperature	Medium	
	Mattole River	Sedimentation/Siltation	High	2004
		Temperature	High	2004
	Navarro River	Sedimentation/Siltation	High	2004
		Temperature	High	2004
	Navarro River Delta	Sedimentation/Siltation	High	2004
	Noyo River	Sedimentation/Siltation	High	2003
	Redwood Creek, Redwood Creek HU			
		Sedimentation/Siltation	Medium	

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
	Russian River, All segments	Sedimentation/Siltation	Medium	
	Scott River	Sedimentation/Siltation Temperature	Medium Medium	
	Shasta River	Nutrients Organic enrichment/Low D.O. Temperature	Medium Medium Medium	
	Stemple Creek/ Estero de San Antonio, Bodega HU, Estero de San Antonio HA	Nutrients	Medium	
	Ten Mile River	Sedimentation/Siltation	High	2003
	Trinity River, East Fork, Trinity River HU, Upper HA	Sediment	Medium	
	Trinity River, Lower	Sedimentation/Siltation	Medium	
	Trinity River, Middle	Sedimentation/Siltation	Medium	
	Trinity River, South Fork	Sedimentation/Siltation	Medium	
	Trinity River, Upper	Sedimentation/Siltation	Medium	
	Van Duzen River (tributary to Eel River)	Sedimentation/Siltation	Medium	

2

Alameda Creek	Diazinon	High	2004
Alamitos Creek	Mercury	Medium	
Arroyo Corte Madera Del Presidio	Diazinon	High	2004
Arroyo De La Laguna	Diazinon	High	2004
Arroyo Del Valle	Diazinon	High	2004
Arroyo Las Positas	Diazinon	High	2004
Arroyo Mocho	Diazinon	High	2004
Butano Creek	Sedimentation/Siltation	Medium	
Calabazas Creek			

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
		Diazinon	High	2004
	Calero Reservoir			
		Mercury	Medium	
	Carquinez Strait			
		Exotic Species	Medium	
		Mercury	High	2003
		PCBs	High	2004
	Central Basin, San Francisco Bay			
		Exotic Species	Medium	
		Mercury	High	2003
		PCBs	High	2004
	Corte Madera Creek			
		Diazinon	High	2004
	Coyote Creek (Marin County)			
		Diazinon	High	2004
	Coyote Creek (Santa Clara Co.)			
		Diazinon	High	2004
	Gallinas Creek			
		Diazinon	High	2004
	Guadalupe Creek			
		Mercury	Medium	
	Guadalupe Reservoir			
		Mercury	Medium	
	Guadalupe River			
		Diazinon	High	2004
		Mercury	Medium	
	Lagunitas Creek			
		Sedimentation/Siltation	Medium	
	Laurel Creek			
		Diazinon	High	2004
	Ledgewood Creek			
		Diazinon	High	2004
	Los Gatos Creek (R2)			
		Diazinon	High	2004
	Matadero Creek			
		Diazinon	High	2004
	Miller Creek			
		Diazinon	High	2004
	Mt. Diablo Creek			
		Diazinon	High	2004
	Napa River			
		Nutrients	Medium	
		Sedimentation/Siltation	Medium	
	Novato Creek			
		Diazinon	High	2004

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
	Oakland Inner Harbor (Fruitvale site and Pacific Dry-Dock Site)	Exotic Species	Medium	
		Mercury	High	2003
		PCBs	High	2004
	Permanente Creek	Diazinon	High	2004
	Pescadero Creek	Sedimentation/Siltation	Medium	
	Petaluma River	Nutrients	Medium	
		Pathogens	Medium	
		Sedimentation/Siltation	Medium	
	Petaluma River Tidal portion	Nutrients	Medium	
		Pathogens	Medium	
	Pine Creek	Diazinon	High	2004
	Pinole Creek	Diazinon	High	2004
	Richardson Bay	Exotic Species	Medium	
		Mercury	High	2003
		PCBs	High	2004
	Rodeo Creek	Diazinon	High	2004
	Sacramento San Joaquin Delta	Exotic Species	Medium	
		Mercury	High	2003
		PCBs	High	2004
	San Antonio Creek	Diazinon	High	2004
	San Felipe Creek	Diazinon	High	2004
	San Francisco Bay Central	Exotic Species	Medium	
		Mercury	High	2003
		PCBs	High	2004
	San Francisco Bay Lower	Exotic Species	Medium	
		Mercury	High	2003
		PCBs	High	2004
	San Francisco Bay South	Exotic Species	Medium	
		Mercury	High	2003
		PCBs	High	2004
	San Francisquito Creek	Diazinon	High	2004

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
		Sedimentation/Siltation	Medium	
	San Gregorio Creek			
		Sedimentation/Siltation	Medium	
	San Leandro Bay			
		Exotic Species	Medium	
		Mercury	High	2003
	San Leandro Creek, Lower			
		Diazinon	High	2004
	San Lorenzo Creek			
		Diazinon	High	2004
	San Mateo Creek			
		Diazinon	High	2004
	San Pablo Bay			
		Diazinon	Low	
		Exotic Species	Medium	
		Mercury	High	2003
		PCBs	High	2004
	San Pablo Creek			
		Diazinon	High	2004
	San Rafael Creek			
		Diazinon	High	2004
	Saratoga Creek			
		Diazinon	High	2004
	Sonoma Creek			
		Nutrients	Medium	
		Sedimentation/Siltation	Medium	
	Stevens Creek			
		Diazinon	High	2004
	Suisun Bay			
		Exotic Species	Medium	
		Mercury	High	2003
		PCBs	High	2004
	Suisun Slough			
		Diazinon	High	2004
	Tomaes Bay			
		Mercury	Medium	
		Nutrients	Medium	
		Pathogens	High	2004
		Sedimentation/Siltation	Medium	
	Walker Creek			
		Mercury (Metals)	Medium	
		Nutrients	Medium	
		Sedimentation/Siltation	Medium	
	Walnut Creek			
		Diazinon	High	2004
	Wildcat Creek			
		Diazinon	High	2004

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
3	Aptos Creek	Pathogens	Medium	
	Blanco Drain	Pesticides	Medium	
	Carbonera Creek	Pathogens	Medium	
		Sedimentation/Siltation	High	2002
	Chorro Creek	Nutrients	High	2002
		Sedimentation/Siltation	High	2002
	Clear Creek	Mercury	Medium	
	Espinosa Slough	Pesticides	Medium	
		Priority Organics	Medium	
	Hernandez Reservoir	Mercury	Medium	
	Las Tablas Creek	Metals	High	2002
	Las Tablas Creek, North Fork	Metals	High	2002
	Las Tablas Creek, South Fork	Metals	High	2002
	Llagas Creek	Nutrients	Medium	
		Sedimentation/Siltation	Medium	
	Lompico Creek	Pathogens	Medium	
		Sedimentation/Siltation	High	2002
	Los Osos Creek	Nutrients	High	2002
		Sedimentation/Siltation	High	2002
	Monterey Harbor	Metals	Medium	
	Moro Cojo Slough	Pesticides	Medium	
	Morro Bay	Metals	Medium	
		Pathogens	High	2002
		Sedimentation/Siltation	High	2002
	Nacimiento Reservoir	Metals	High	2003
	Old Salinas River Estuary	Nutrients	Medium	
		Pesticides	Medium	

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
	Pajaro River	Nutrients	Medium	
		Sedimentation/Siltation	Medium	
	Rider Gluch Creek	Sedimentation/Siltation	Medium	
	Salinas Reclamation Canal	Pesticides	Medium	
		Priority Organics	Medium	
	Salinas River	Nutrients	Medium	
		Pesticides	Medium	
		Sedimentation/Siltation	Medium	
	Salinas River Lagoon (North)	Nutrients	Medium	
		Pesticides	Medium	
		Sedimentation/Siltation	Medium	
	Salinas River Refuge Lagoon (South)	Nutrients	Medium	
		Pesticides	Medium	
	San Benito River	Sedimentation/Siltation	Medium	
	San Lorenzo River	Pathogens	Medium	
		Sedimentation/Siltation	High	2002
	San Lorenzo River Lagoon	Pathogens	Medium	
	San Luis Obispo Creek (Below W. Marsh Street)	Nutrients	High	2004
		Pathogens	High	2004
		Priority Organics	High	2002
	Schwan Lake	Pathogens	Medium	
	Shingle Mill Creek	Sedimentation/Siltation	High	2002
	Soquel Lagoon	Pathogens	Medium	
	Tembladero Slough	Pesticides	Medium	
	Valencia Creek	Pathogens	Medium	
	Watsonville Slough	Pathogens	Medium	
		Sedimentation/Siltation	Medium	

4

Abalone Cove Beach

Beach Closures
Priorities-8

High

2002

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
	Aliso Canyon Wash	Selenium	High	2003
	Arroyo Las Posas Reach 1 (Lewis Somis Rd to Fox Barranca) (re-named: Calleguas Creek Reach 6)	Ammonia	High	2002
		Chloride	Medium	
		DDT	Medium	
		Sulfates	High	2003
		Total Dissolved Solids	High	2003
	Arroyo Las Posas Reach 2 (Fox Barranca to Moorpark Fwy (23)) (re-named: Calleguas Creek Reach 6)	Ammonia	High	2002
		Chloride	Medium	
		DDT	Medium	
		Nitrate and Nitrite	High	2002
		Sulfates	High	2003
		Total Dissolved Solids	High	2003
	Arroyo Seco Reach 1 (LA River to West Holly Ave.)	Algae	High	2002
		High Coliform Count	High	2002
	Arroyo Seco Reach 2 (West Holly Avenue to Devils Gate Dam)	Algae	High	2002
		High Coliform Count	High	2002
	Arroyo Simi Reach 1 (Moorpark Frwy (23) to Brea Canyon) and 2 (West Holly Avenue to Devils Gate Dam) (re-named: Calleguas Creek Reach 7)	Ammonia	High	2002
		Boron	High	2003
		Chloride	Medium	
		Sulfates	High	2003
		Total Dissolved Solids	High	2003
	Ashland Avenue Drain	High Coliform Count	High	2002
	Ballona Creek	Cadmium	High	2004
		Chem A	High	2004
		Chlordane	High	2004
		Copper	High	2004
		DDT	High	2004
		Dieldrin	High	2004
		Enteric Viruses	High	2003

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
		High Coliform Count	High	2003
		Lead	High	2004
		PCBs	High	2004
		Sediment Toxicity	High	2004
		Toxicity	High	2004
	Ballona Creek Estuary			
		Chlordane	High	2004
		DDT	High	2004
		High Coliform Count	High	2003
		Lead	High	2004
		PCBs	High	2004
		Sediment Toxicity	High	2004
		Shellfish Harvesting Advisory	High	2003
		Zinc	High	2003
	Beardsley Channel (Above Central Avenue) (re-named: Calleguas Creek Reach 5)			
		Algae	High	2002
		Chem A	Medium	
		Chlordane	Medium	
		Chlorpyrifos	High	2003
		Dacthal	Medium	
		DDT	Medium	
		Dieldrin	Medium	
		Endosulfan	Medium	
		Nitrogen	High	2002
		PCBs	Medium	
		Toxaphene	Medium	
		Toxicity	High	2004
	Bell Creek			
		High Coliform Count	High	2002
	Big Rock Beach			
		Beach Closures	High	2002
		High Coliform Count	High	2002
	Bluff Cove Beach			
		Beach Closures	High	2002
	Brown Barranca/Long Canyon			
		Nitrate and Nitrite	High	2003
	Burbank Western Channel			
		Algae	High	2002
		Ammonia	High	2002
		Cadmium	High	2003
		Odors	High	2002
		Scum/Foam-unnatural	High	2002
	Cabrillo Beach (Inner) LA Harbor Area			
		Beach Closures (Coliform)	High	2004
		DDT	Medium	
		PCBs	Medium	
	Cabrillo Beach (Outer)			

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
		Beach Closures	High	2002
		High Coliform Count	High	2002
	Calleguas Creek Reach 1 and 2 (Estuary to Potrero Rd.) (re-named: Calleguas Creek Reach 2)			
		Ammonia	High	2002
		Chem A	Medium	
		Chlordane	Medium	
		DDT	Medium	
		Endosulfan	Medium	
		Nitrogen	High	2002
		PCBs	Medium	
		Sediment Toxicity	Medium	
	Calleguas Creek Reach 3 (Potrero to Somis Rd.)			
		Chloride	Medium	
		Nitrate and Nitrite	High	2002
		Total Dissolved Solids	High	2003
	Carbon Beach			
		Beach Closures	High	2002
	Castlerock Beach			
		Beach Closures	High	2002
	Channel Islands Harbor			
		Lead	Medium	
		Zinc	Medium	
	Colorado Lagoon			
		Chlordane	Medium	
		DDT	Medium	
		Dieldrin	Medium	
		Lead	Medium	
		PAHs	Medium	
		PCBs	Medium	
		Sediment Toxicity	Medium	
		Zinc	Medium	
	Compton Creek			
		Copper	High	2003
		High Coliform Count	High	2002
		Lead	High	2003
		pH	High	2002
	Conejo Creek Reach 1 (Confluence Call to Santa Rosa Rd.) (re-named: Calleguas Creek Reaches 9A & 9B)			
		Algae (CCR 9A & 9B)	High	2002
		Ammonia (CCR 9B)	High	2002
		Sulfates (CCR 9A & 9B)	High	2003
		Total Dissolved Solids (CCR 9A & 9B)	High	2003
		Toxicity (CCR 9B)	High	2004

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
	Conejo Creek Reach 2 (Santa Rosa Rd. to Thousand Oaks City Limit) (re-named: Calleguas Creek Reaches 9B & 10)	Algae	High	2002
		Ammonia	High	2002
		Chloride	Medium	
		Sulfates	High	2003
		Total Dissolved Solids	High	2003
		Toxaphene	Medium	
		Toxicity	High	2004
	Conejo Creek Reach 3 (Thousand Oaks City Limit to Lynn Rd.) (re-named: Calleguas Creek Reaches 10, 11, & 13)	Algae	High	2002
		Ammonia	High	2002
		Chem A	Medium	
		DDT	Medium	
		Endosulfan	Medium	
		Sulfates	High	2003
		Total Dissolved Solids	High	2003
		Toxaphene	Medium	
		Toxicity	High	2004
	Conejo Creek Reach 4 (Above Lynn Rd.) (re- named: Calleguas Creek Reach 13)	Algae	High	2002
		Ammonia	High	2002
		Chem A	Medium	
		Chloride	Medium	
		DDT	Medium	
		Endosulfan	Medium	
		Sulfates	High	2003
		Total Dissolved Solids	High	2003
		Toxaphene	Medium	
		Toxicity	High	2004
	Conejo Creek/Arroyo Conejo North Fork (re- named: Calleguas Creek Reaches 10 & 12)	Ammonia	High	2002
		Chlordane	Medium	
		DDT	Medium	
		Sulfates	High	2003
		Total Dissolved Solids	High	2003
	Coyote Creek	Abnormal Fish Histology	Medium	
		Algae	High	2003
		Priorities-12		

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
		High Coliform Count	High	2003
	Crystal Lake			
		Organic enrichment/Low D.O.	Medium	
	Dan Blocker Memorial (Coral) Beach			
		High Coliform Count	High	2002
	Dockweiler Beach			
		Beach Closures	High	2002
		High Coliform Count	High	2002
	Dominguez Channel (above Vermont)			
		Aldrin	Medium	
		Ammonia	Medium	
		Chem A	Medium	
		Chlordane	Medium	
		Chromium	Medium	
		Copper	Medium	
		DDT	Medium	
		Dieldrin	Medium	
		High Coliform Count	High	2003
		Lead	Medium	
		PAHs	Medium	
		PCBs	Medium	
	Dominguez Channel (Estuary to Vermont)			
		Aldrin	Medium	
		Ammonia	Medium	
		Benthic Community Effects	Medium	
		Chem A	Medium	
		Chlordane	Medium	
		Chromium	Medium	
		DDT	Medium	
		Dieldrin	Medium	
		High Coliform Count	High	2003
		Lead	Medium	
		PAHs	Medium	
		Zinc	Medium	
	Duck Pond Agricultural Drains/Mugu Drain/Oxnard Drain No. 2			
		Chem A	Medium	
		Chlordane	Medium	
		DDT	Medium	
		Nitrogen	High	2002
		Sediment Toxicity	Medium	
		Toxaphene	Medium	
		Toxicity	High	2004
	El Dorado Lakes			
		Algae	Medium	
		Ammonia	Medium	
		Copper	Medium	
		Eutrophic	Medium	
		Priorities-13		

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
		Lead	Medium	
		Mercury	Medium	
		pH	Medium	
	Elizabeth Lake	Eutrophic	Medium	
		Organic enrichment/Low D.O.	Medium	
		pH	Medium	
		Trash	Medium	
	Escondido Beach	Beach Closures	High	2002
	Flat Rock Point Beach Area	Beach Closures	High	2002
	Fox Barranca	Boron	High	2003
		Nitrate and Nitrite	High	2002
		Sulfates	High	2003
		Total Dissolved Solids	High	2003
	Hermosa Beach	Beach Closures	High	2002
	Inspiration Point Beach	Beach Closures	High	2002
	La Costa Beach	Beach Closures	High	2002
	Lake Hughes	Algae	Medium	
		Eutrophic	Medium	
		Fish Kills	Medium	
		Odors	Medium	
		Trash	Medium	
	Lake Lindero	Algae	High	2002
		Eutrophic	High	2002
		Odors	High	2002
		Trash	Medium	
	Lake Sherwood	Algae	High	2003
		Ammonia	High	2002
		Eutrophic	High	2002
		Mercury	High	2004
		Organic enrichment/Low D.O.	High	2002
	Las Flores Beach	High Coliform Count	High	2002
	Las Tunas Beach	Beach Closures	High	2002
	Las Virgenes Creek	High Coliform Count	High	2003
		Nutrients (Algae)	High	2003
		Organic enrichment/Low D.O.	High	2002
		Scum/Foam-unnatural	High	2002
		Selenium	High	2004
		Trash	Medium	

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
	Legg Lake	Ammonia	Medium	
		Copper	Medium	
		Lead	Medium	
		Odors	Medium	
		pH	Medium	
	Leo Carillo Beach (South of County Line)	Beach Closures	High	2002
		High Coliform Count	High	2002
	Lindero Creek Reach 1	Algae	High	2003
		High Coliform Count	High	2003
		Scum/Foam-unnatural	High	2002
		Selenium	High	2004
		Trash	Medium	
	Lindero Creek Reach 2 (Above Lake)	Algae	High	2003
		High Coliform Count	High	2003
		Scum/Foam-unnatural	High	2002
		Selenium	High	2004
		Trash	Medium	
	Long Beach Harbor Main Channel, SE, W Basin, Pier J, Breakwater	Benthic Community Effects	Medium	
		DDT	Medium	
		PAHs	Medium	
		PCBs	Medium	
		Sediment Toxicity	Medium	
	Long Point Beach	High Coliform Count	High	2002
	Los Angeles Fish Harbor	DDT	Medium	
		PAHs	Medium	
		PCBs	Medium	
	Los Angeles Harbor Consolidated Slip	Benthic Community Effects	Medium	
		Chlordane	Medium	
		Chromium	Medium	
		DDT	Medium	
		Lead	Medium	
		PAHs	Medium	
		PCBs	Medium	
		Sediment Toxicity	Medium	
	Los Angeles Harbor Inner Breakwater	DDT	Medium	
		PAHs	Medium	

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
	Los Angeles Harbor Main Channel	PCBs	Medium	
		Beach Closures	High	2004
		Copper	Medium	
		DDT	Medium	
		PAHs	Medium	
		PCBs	Medium	
		Sediment Toxicity	Medium	
		Zinc	Medium	
	Los Angeles Harbor Southwest Slip	DDT	Medium	
		PCBs	Medium	
		Sediment Toxicity	Medium	
	Los Angeles River Reach 1 (Estuary to Carson Street)	Ammonia	High	2003
		Copper	High	2003
		High Coliform Count	High	2003
		Lead	High	2003
		Nutrients (Algae)	High	2003
		pH	High	2003
		Scum/Foam-unnatural	High	2003
		Zinc	High	2003
	Los Angeles River Reach 2 (Carson to Figueroa Street)	Ammonia	High	2003
		High Coliform Count	High	2003
		Lead	High	2003
		Nutrients (Algae)	High	2003
		Odors	High	2003
		Scum/Foam-unnatural	High	2003
	Los Angeles River Reach 3 (Figueroa St. (Thomas Guide 59A-H9) to Riverside Drive (Thomas Guide 564-A3))	Ammonia	High	2003
		Nutrients (Algae)	High	2003
		Odors	High	2003
		Scum/Foam-unnatural	High	2003
	Los Angeles River Reach 3 (Figueroa St. (Thomas Guide 59A-H9) to Riverside Drive (Thomas Guide 564-A3)) (Figueroa St. to Riverside Drive)	Scum/Foam-unnatural	High	2003

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
	Los Angeles River Reach 4 (Riverside Drive (Thomas Guide 564-A3) to Sepulveda Dam (Thomas Guide 561-G2))	Ammonia	High	2003
		High Coliform Count	High	2003
		Lead	High	2003
		Nutrients (Algae)	High	2003
		Odors	High	2003
		Scum/Foam-unnatural	High	2003
	Los Angeles River Reach 5 (at Sepulveda Basin)	Ammonia	High	2003
		Nutrients (Algae)	High	2003
		Odors	High	2003
		Scum/Foam-unnatural	High	2003
	Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin)	High Coliform Count	High	2003
	Los Cerritos Channel	Ammonia	Medium	
		Copper	Medium	
		High Coliform Count	Medium	
		Lead	Medium	
		Zinc	Medium	
	Machado Lake (Harbor Park Lake)	Chem A	Medium	
		Trash	Medium	
	Malaga Cove Beach	Beach Closures	High	2002
	Malibu Lake	Algae	High	2002
		Eutrophic	High	2002
		Organic enrichment/Low D.O.	High	2002
	Malibu Beach	Beach Closures	High	2002
	Malibu Creek	High Coliform Count	High	2003
		Nutrients (Algae)	High	2003
		Scum/Foam-unnatural	High	2003
		Trash	Medium	
	Malibu Lagoon	Enteric Viruses	High	2002
		Eutrophic	High	2002
		High Coliform Count	High	2003
		Shellfish Harvesting Advisory	High	2002
		Swimming Restrictions	High	2002

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
	Malibu Lagoon Beach (Surfrider)	Beach Closures	High	2002
		High Coliform Count	High	2002
	Manhattan Beach	Beach Closures	High	2002
	Marina del Rey - Back Basin	Zinc	Medium	
	Marina del Rey Harbor - Back Basins	Chlordane	Medium	
		DDT	Medium	
		Dieldrin	Medium	
		Fish Consumption Advisory	Medium	
		High Coliform Count	High	2003
		Lead	Medium	
		PCBs and historical pesticides	Medium	
		Sediment Toxicity	Medium	
	Marina del Rey Harbor Beach	Beach Closures	High	2003
		High Coliform Count	High	2003
	McGrath Beach	High Coliform Count	High	2003
	McGrath Lake	Chlordane	Medium	
		DDT	Medium	
		Sediment Toxicity	Medium	
	Medea Creek Reach 1 (Lake to Confluence with Lindero)	Algae	High	2003
		High Coliform Count	High	2003
		Selenium	High	2004
		Trash	Medium	
	Medea Creek Reach 2 (Above Confluence with Lindero)	Algae	High	2003
		High Coliform Count	High	2003
		Selenium	High	2004
		Trash	Medium	
	Mint Canyon Creek Reach 1 (Confluence to Rowler Canyon)	Nitrate and Nitrite	High	2003
	Monrovia Canyon Creek	Lead	High	2003
	Mugu Lagoon (renamed: Calleguas Creek, Reach 1)	Chlordane	Medium	
		Copper	Medium	

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
		DDT	Medium	
		Endosulfan	Medium	
		Mercury	Medium	
		Nickel	Medium	
		Nitrogen	High	2002
		PCBs	Medium	
		Sediment Toxicity	Medium	
		Sedimentation/Siltation	Medium	
		Zinc	Medium	
	Munz Lake			
		Eutrophic	Medium	
		Trash	Medium	
	Nicholas Canyon Beach			
		Beach Closures	High	2002
	Palo Comado Creek			
		High Coliform Count	High	2003
	Palo Verde Shoreline Park Beach			
		Pathogens	High	2002
	Paradise Cove Beach			
		Beach Closures	High	2002
		High Coliform Count	High	2002
	Pico Kenter Drain			
		Copper	Medium	
		Enteric Viruses	High	2002
		High Coliform Count	High	2002
		Lead	Medium	
		Toxicity	Medium	
	Point Dume Beach			
		Beach Closures	High	2002
	Point Fermin Park Beach			
		Beach Closures	High	2002
	Point Vicente Beach			
		Beach Closures	High	2002
	Port Hueneme Harbor (Back Basins)			
		DDT	Medium	
		PCBs	Medium	
	Portuguese Bend Beach			
		Beach Closures	High	2002
	Puddingstone Reservoir			
		Chlordane	Medium	
		DDT	Medium	
		Mercury	Medium	
	Puerco Beach			
		Beach Closures	High	2002
	Redondo Beach			
		Beach Closures	High	2002
		High Coliform Count	High	2002
	Resort Point Beach			

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
		Beach Closures	High	2002
	Revolon Slough Main Branch (Mugu Lagoon to Central Avenue) (renamed: Calleguas Creek, Reach 4)			
		Algae	High	2002
		Chem A	Medium	
		Chlordane	Medium	
		Chlorpyrifos	Medium	
		DDT	Medium	
		Dieldrin	Medium	
		Endosulfan	Medium	
		Nitrogen	High	2002
		PCBs	Medium	
		Selenium	Medium	
		Toxaphene	Medium	
		Toxicity	High	2004
	Rio De Santa Clara/Oxnard Drain No. 3			
		Chem A	Medium	
		Chlordane	Medium	
		DDT	Medium	
		Nitrogen	High	2002
		PCBs	Medium	
		Sediment Toxicity	Medium	
		Toxaphene	Medium	
	Rio Hondo Reach 1 (Confluence LA River to Santa Ana Fwy)			
		Copper	High	2003
		High Coliform Count	High	2002
		Lead	High	2003
		pH	High	2002
		Zinc	High	2003
	Rio Hondo Reach 2 (At Spreading Grounds)			
		High Coliform Count	High	2002
	Robert H. Meyer Memorial Beach			
		Beach Closures	High	2002
	Rocky Point Beach			
		Beach Closures	High	2002
	Royal Palms Beach			
		Beach Closures	High	2002
	San Gabriel River Estuary			
		Abnormal Fish Histology	Medium	
	San Gabriel River Reach 1 (Estuary to Firestone)			
		Abnormal Fish Histology	Medium	
		Algae	High	2003
		High Coliform Count	High	2003

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
	San Gabriel River Reach 2 (Firestone to Whittier Narrows Dam)	High Coliform Count	High	2003
		Lead	Medium	
	San Jose Creek Reach 2 (Temple to I-10 at White Ave.)	Algae	High	2003
		High Coliform Count	High	2003
	San Pedro Bay Near/Off Shore Zones - Cabrillo Pier Area	DDT	Medium	
		PAHs	Medium	
		PCBs	Medium	
		Sediment Toxicity	Medium	
	Santa Clara River Estuary	Chem A	Medium	
		High Coliform Count	Medium	
		Toxaphene	Medium	
	Santa Clara River Reach 3 (Dam to Above Sp Creek/Blw Timber Canyon)	Ammonia	High	2003
		Chloride	High	2002
	Santa Clara River Reach 7 (Blue Cut to West Pier Hwy 99)	Chloride	High	2002
		High Coliform Count	Medium	
	Santa Clara River Reach 8 (W Pier Hwy 99 to Bouquet Canyon Rd.)	Chloride	High	2002
		High Coliform Count	Medium	
	Santa Clara River Reach 9 (Bouquet Canyon Rd. to above Lang Gag)	High Coliform Count	Medium	
	Santa Fe Dam Park Lake	Copper	Medium	
		Lead	Medium	
		pH	Medium	
	Santa Monica Bay Offshore/Nearshore	Chlordane	Medium	
	Santa Monica Beach	Beach Closures	High	2002
		High Coliform Count	High	2002

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
	Santa Monica Canyon	High Coliform Count	High	2002
		Lead	Medium	
	Sea Level Beach	Beach Closures	High	2002
	Sepulveda Canyon	High Coliform Count	High	2002
		Lead	Medium	
	Stokes Creek	High Coliform Count	High	2002
	Topanga Beach	Beach Closures	High	2002
		High Coliform Count	High	2002
	Topanga Canyon Creek	Lead	Medium	
	Torrance Beach	Beach Closures	High	2002
		High Coliform Count	High	2002
	Torrance Carson Channel	Copper	Medium	
		High Coliform Count	High	2003
		Lead	Medium	
	Torrey Canyon Creek	Nitrate and Nitrite	High	2003
	Trancas Beach (Broad Beach)	Beach Closures	High	2002
		High Coliform Count	High	2002
	Triunfo Canyon Creek Reach 1	Lead	High	2004
		Mercury	High	2004
	Triunfo Canyon Creek Reach 2	Lead	High	2004
		Mercury	High	2004
	Tujunga Wash (LA River to Hansen Dam)	Ammonia	High	2002
		Copper	High	2003
		High Coliform Count	High	2002
		Odors	High	2002
		Scum/Foam-unnatural	High	2002
	Venice Beach	Beach Closures	High	2002
		High Coliform Count	High	2002
	Ventura Harbor: Ventura Keys			
		High Coliform Count	Medium	
	Ventura River Estuary			

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
		Algae	Medium	
		Eutrophic	Medium	
		Trash	Medium	
	Ventura River Reach 1 and 2 (Estuary to Weldon Canyon)			
		Algae	Medium	
	Ventura River Reach 3 (Weldon Canyon to Confluence w/ Coyote Creek)			
		Pumping	Medium	
		Water Diversion	Medium	
	Ventura River Reach 4 (Coyote Creek to Camino Cielo Rd)			
		Pumping	Medium	
		Water Diversion	Medium	
	Verdugo Wash Reach 1 (LA River to Verdugo Rd.)			
		Algae	High	2002
		High Coliform Count	High	2002
	Verdugo Wash Reach 2 (Above Verdugo Road)			
		Algae	High	2002
		High Coliform Count	High	2002
	Walnut Creek Wash (Drains from Puddingstone Res)			
		pH	High	2003
		Toxicity	High	2003
	Westlake Lake			
		Algae	High	2003
		Ammonia	High	2002
		Eutrophic	High	2002
		Lead	High	2004
		Organic enrichment/Low D.O.	High	2002
	Wheeler Canyon/Todd Barranca			
		Nitrate and Nitrite	High	2003
	Whites Point Beach			
		Beach Closures	High	2002
	Will Rogers Beach			
		Beach Closures	High	2002
		High Coliform Count	High	2002
	Wilmington Drain			
		Ammonia	Medium	
		Copper	Medium	
		High Coliform Count	High	2003
		Lead	Medium	
	Zuma Beach (Westward Beach)			
		Beach Closures	High	2002
		Priorities-23		

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
5	Arcade Creek	Chlorpyrifos	High	2003
		Diazinon	High	2003
	Bear Creek	Mercury	Medium	
	Bear River, Lower	Diazinon	Medium	
	Bear River, Upper	Mercury	Medium	
	Black Butte Reservoir	Mercury	Medium	
	Butte Slough	Diazinon	Medium	
	Cache Creek, Lower	Mercury	Medium	
	Camp Far West Reservoir	Mercury	Medium	
	Chicken Ranch Slough	Chlorpyrifos	High	2003
		Diazinon	High	2003
	Clear Lake	Mercury	High	2002
		Nutrients	Medium	
	Colusa basin Drain	Azinophos-methyl	Medium	
		Diazinon	Medium	
	Delta Waterways	Chlorpyrifos	High	2004
		Diazinon	High	2004
		Electrical Conductivity	Medium	
		Mercury	Medium	
		Organic Enrichment/ Low D.O.	High	2004
	Elder Creek	Chlorpyrifos	High	2003
		Diazinon	High	2003
	Elk Grove Creek	Diazinon	High	2003
	Feather River, Lower	Diazinon	High	2003
		Mercury	Medium	
	Five Mile Slough	Chlorpyrifos	Medium	
		Diazinon	Medium	
	Harley Gulch	Mercury	Medium	
	Jack Slough	Diazinon	Medium	

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
	Lake Combie	Mercury	Medium	
	Lake Englebright	Mercury	Medium	
	Little Grizzly Creek	Copper	Medium	
		Zinc	Medium	
	Merced River	Chlorpyrifos/Diazinon	Medium	
	Mormon Slough	Pathogens	Medium	
	Morrison Creek	Diazinon	High	2003
	Mosher Slough	Chlorpyrifos/Diazinon	Medium	
	Mud Slough	Selenium	Medium	
	Natomas East Main Drainage Canal	Diazinon	Medium	
	Orestimba Creek	Azinophos- methyl	Medium	
		Chlorpyrifos	Medium	
		Diazinon	Medium	
	Rollins Reservoir	Mercury	Medium	
	Sacramento River (Red Bluff to Delta)	Diazinon	High	2003
		Mercury	Medium	
	Sacramento Slough	Diazinon	Medium	
	San Joaquin River	Boron	High	2003
		Chlorpyrifos	High	2004
		Diazinon	High	2004
		Electrical Conductivity	High	2003
		Mercury	Medium	
	Scotts Flat Reservoir	Mercury	Medium	
	Smith Canal	Organo-phosphorous Pesticides	Medium	
	Stanislaus River, Lower	Diazinon	Medium	
	Stockton Deep Water Channel	Pathogens	Medium	
	Strong Ranch Slough	Chlorpyrifos	High	2003

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
		Diazinon	High	2003
	Sulphur Creek			
		Mercury	Medium	
	Sutter Bypass			
		Diazinon	Medium	
	Tuolumne River, Lower			
		Diazinon	Medium	
	Walker Slough			
		Pathogens	Medium	

6

	Bear Creek (Placer County)			
		Sedimentation/Siltation	Medium	
	Blackwood Creek			
		Sedimentation/Siltation	Medium	
	Bodie Creek			
		Metals	Medium	
	Bridgeport Reservoir			
		Nutrients	Medium	
		Sedimentation/Siltation	Medium	
	Bronco Creek			
		Sedimentation/Siltation	Medium	
	Cinder Cone Springs			
		Nutrients	Medium	
		Salinity/TDS/Chlorides	Medium	
	Clearwater Creek			
		Sedimentation/Siltation	Medium	
	Crowley Lake			
		Arsenic	Medium	
		Nutrients	Medium	
	Gray Creek (Nevada County)			
		Sedimentation/Siltation	Medium	
	Green Valley Lake Creek			
		Priority Organics	Medium	
	Haiwee Reservoir			
		Copper	High	2003
	Horseshoe Lake (San Bernadino County)			
		Sedimentation/Siltation	Medium	
	Hot Springs Canyon			
		Sedimentation/Siltation	Medium	
	Indian Creek Reservoir			
		Phosphorus	High	2002
	Lake Tahoe			
		Nutrients	Medium	
		Sedimentation/Siltation	Medium	
	Pleasant Valley Reservoir			
		Organic enrichment/Low D.O.	Medium	
	Skedaddle Creek			

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
		High Coliform Count	Medium	
	Squaw Creek			
		Sedimentation/Siltation	Medium	
	Tinemaha Reservoir			
		Metals	Medium	
	Topaz Lake			
		Sedimentation/Siltation	Medium	
	Truckee River			
		Sedimentation/Siltation	Medium	
	Ward Creek			
		Sedimentation/Siltation	Medium	

7

	Coachella Valley Storm Channel			
		Pathogens	Medium	
	Imperial Valley Drains			
		Sedimentation/Siltation	High	2004
	New River			
		Dissolved Organic Matter/DO	Medium	
		Sedimentation/Siltation	High	2002
		Trash	Medium	
	Palo Verde Outfall Drain			
		Pathogens	High	2003
	Salton Sea			
		Nutrients	High	2004
		Selenium	Medium	

8

	Big Bear Lake			
		Metals (copper, mercury and others)	Medium	
		Nutrients/noxious aquatic plants	High	2004
		Sediment/Siltation	High	2004
	Chino Creek, Reach 1			
		Nutrients	Medium	
		Pathogens	High	2004
	Chino Creek, Reach 2			
		Pathogens	Medium	
	Cucamonga Creek, Valley Reach			
		Pathogens	High	2004
	Grout Creek			
		Metals (copper, mercury and others)	Medium	
		Nutrients/noxious aquatic plants	High	2004
	Knickerbocker Creek			
		Metals (copper, mercury and others)	Medium	
		Pathogens	High	2004

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
	Lake Elsinore	Nutrients	High	2003
		Organic enrichment/low D.O.	High	2004
		Sediment/siltation	High	2003
		Unknown toxicity	High	2004
	Mill Creek (Prado area)	Nutrients	Medium	2004
		Pathogens	High	
		Suspended Solids	Medium	
	Newport Bay, Lower	Metals	Medium	2003
		Pesticides	High	
		Priority Organics	Medium	
	Newport Bay, Upper	Metals	Medium	2003
		Pesticides	High	
	Prado Park Lake	Pathogens	High	2004
	Rathbone Creek	Nutrients/noxious aquatic plants	High	2004
		Sediment/Siltation	High	2004
	San Diego Creek, Reach 1	Pesticides	High	2003
	San Diego Creek, Reach 2	Metals	Medium	
	Santa Ana River, Reach 3	Pathogens	High	2004
	Summit Creek	Nutrients/noxious aquatic plants	High	2004

9

	Aliso Creek	bacteria indicators	Medium	
	Aliso Creek (mouth)	bacteria indicators	Medium	
	Buena Vista Lagoon	Sedimentation/Siltation	Medium	
	Chollas Creek	bacteria indicators	Medium	
		Metals (Cd, Cu, Pb, Zn)	High	2004
		Toxicity (Diazinon)	High	2002
	Dana Point Harbor	Bacteria Indicators	Medium	
	Forester Creek	Fecal Coliform	Medium	
	Mission Bay	bacteria indicators	Medium	
	Pacific Ocean Shoreline, Aliso Beach HSA			

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
		bacteria indicators	Medium	
	Pacific Ocean Shoreline, Dana Point HSA			
		bacteria indicators	Medium	
	Pacific Ocean Shoreline, Laguna Beach HSA			
		bacteria indicators	Medium	
	Pacific Ocean Shoreline, Lower San Juan HSA			
		bacteria indicators	Medium	
	Pacific Ocean Shoreline, San Clemente HA			
		bacteria indicators	Medium	
	Pacific Ocean Shoreline, San Diego HU			
		bacteria indicators	Medium	
	Pacific Ocean Shoreline, Scripps HA			
		bacteria indicators	Medium	
	Pine Valley Creek (Upper)			
		Enterococci	Medium	
	Rainbow Creek			
		Eutrophic (Nutrients)	High	2003
	San Diego Bay Shoreline, 32nd St San Diego Naval Station			
		Degraded Benthic Community and Sediment Toxicity	Medium	
	San Diego Bay Shoreline, between Sampson and 28th Streets			
		Copper	High	2003
		Mercury	High	2003
		PAHs	High	2003
		PCBs	High	2003
		Zinc	High	2003
	San Diego Bay Shoreline, Downtown Anchorage			
		Degraded Benthic Community and Sediment Toxicity	Medium	
	San Diego Bay Shoreline, near Chollas Creek			
		Degraded Benthic Community and Sediment Toxicity	Medium	
	San Diego Bay Shoreline, near Coronado Bridge			
		Degraded Benthic Community and Sediment Toxicity	Medium	
	San Diego Bay Shoreline, near Sub Base			

Region	Water Body	Pollutant/Stressor	Priority	TMDL Completion Date
		Degraded Benthic Community and Sediment Toxicity	Medium	
	San Diego Bay Shoreline, near Switzer Creek (was San Diego Bay at Mouth of Switzer Creek)	Chlordane, Lindane, PAHs	Medium	
	San Diego Bay Shoreline, north of 24th Street Marine Terminal	Degraded Benthic Community and Sediment Toxicity	Medium	
	San Diego Bay Shoreline, Seventh Street Channel	Degraded Benthic Community and Sediment Toxicity	Medium	
	San Diego Bay Shoreline, vicinity of B Street and Broadway Piers	Degraded Benthic Community and Sediment Toxicity	Medium	
	San Diego Bay, Shelter Island Yacht Basin	Metals (dissolved Cu)	High	2003
	San Elijo Lagoon	Sedimentation/Siltation	Medium	
	San Juan Creek	bacteria indicators	Medium	
	San Juan Creek (mouth)	bacteria indicators	Medium	
	Tecolote Creek	bacteria indicators	Medium	

Table 5: Proposed Additions to the TMDLs Completed List

Region	Water Body	Pollutant/Stressor	Year TMDL Completed
<i>1</i>	Garcia River	Sediment	2002
<i>4</i>	Ballona Creek	Trash	2002
	East Fork San Gabriel River	Trash	2000
	Los Angeles River	Trash	2002
<i>5</i>	Grasslands Marsh	Selenium	2000
	Sacramento River	Cadmium	2002
	Sacramento River	Copper	2002
	Sacramento River	Zinc	2002
	Salt Slough	Selenium	1999
	San Joaquin River	Selenium	2002
<i>6</i>	Heavenly Valley Creek, USFS boundary to Trout Creek) (was Heavenly Valley Creek)	Sediment	2002
<i>7</i>	Alamo River	Sediment	2002
	New River	Pathogen	2002
<i>8</i>	Newport Bay/San Diego Creek	Fecal Coliform	2000
	Newport Bay/San Diego Creek	Nitrogen	1999
	Newport Bay/San Diego Creek	Phosphorus	1999
	Newport Bay/San Diego Creek	Sediment	1999
	Santa Ana River	Nutrients	1994

Table 6: Proposed Additions to the Enforceable Program List

Region	Water Body	Pollutant/Stressor	Program
2	Castro Cove, Richmond	Mercury, Selenium, PAHs, Dieldrin	Consolidated Toxic Hot Spots Cleanup Plan, SWRCB Resolution No.99-065; ChevronTexaco Remediation Plan
	Peyton Slough	Silver, Cadmium, Copper, Selenium, Zinc, PCBs, Chlordane, ppDDE, Pyrene	Consolidated Toxic Hot Spots Cleanup Plan, SWRCB Resolution No.99-065; Cleanup and Abatement Orders
	Stege Marsh	Arsenic, Copper, Mercury, Selenium, Zinc, Chlordane, Dieldrin, ppDDE, Dacthal, Endosulfan I, Endosulfan sulfate, Dichlorobenzophenone, Heptachlor epoxide, Hexachlorobenzene, Mirex, Oxidiazon, Toxaphene, PCBs	Consolidated Toxic Hot Spots Cleanup Plan, SWRCB Resolution No.99-065; Cleanup and Abatement Orders
4	Coyote Creek	Ammonia Toxicity	NPDES Permit NPDES Permit
	Rio Hondo Reach 1	Ammonia	NPDES Permit
	Rio Hondo Reach 2	Ammonia	NPDES Permit
	San Gabriel River Estuary	Ammonia as Nitrogen	NPDES Permit
	San Gabriel River Reach 1	Ammonia Toxicity	NPDES Permit NPDES Permit
	San Gabriel River Reach 2	Ammonia	NPDES Permit
	San Gabriel River Reach 3	Toxicity	NPDES Permit
	San Jose Creek Reach 1 (SG Confluence to Temple St.)	Ammonia	NPDES Permit
	San Jose Creek Reach 2 (Temple St. to I 10 at White Ave.)	Ammonia	NPDES Permit
	Santa Clara River Reach 7		

Region	Water Body	Pollutant/Stressor	Program
6	Santa Clara River Reach 8	Ammonia	NPDES Permit
		Ammonia	NPDES Permit
		Nitrite-Nitrogen	
	Mono Lake	Salinity, TDS, Chlorides	SWRCB Decision 1631
	Searles Lake	Petroleum Hydrocarbons	Waste Discharge Requirements; Cleanup and Abatement Order No. 6-00-64; Cleanup and Abatement Order No. 6-00-64A1
		Salinity, TDS, Chlorides	Waste Discharge Requirements; Cleanup and Abatement Order No. 6-00-64; Cleanup and Abatement Order No. 6-00-64A1

Table 7: Proposed Monitoring List

Region	Water Body	Pollutant/Stressor
1	Alder Creek	Sediment and Temperature
	Beith Creek	Sediment
	Brush Creek	Sediment
	Casper Creek	Pathogens
	Cottaneva Creek	Sediment
	Dehaven Creek	Sediment
	East Fork Trinity River	Mercury
	Elk Creek	Sediment
	Greenwood Creek	Sediment and Temperature
	Grotzman Creek	Sediment
	Hardy Creek	Sediment
	Howard Creek	Sediment
	Humboldt Bay	PCBs and Dieldrin Sediment
	Juan Creek	Sediment
	Klamath River	Sediment
	Laguna de Santa Rosa	Nutrients
	Mad River Slough	PCBs
	Mallo Pass Creek	Sediment
	Pudding Creek	Pathogens
	Russian River	Diazinon

Region	Water Body	Pollutant/Stressor
	Schooner Gulch	Sediment
	Shasta River	Sediment and Nutrients
	Tule Lake and Lower Klamath Lake National Wildlife Refuge	Low Dissolved Oxygen and Unionized Ammonia
	Usal Creek	Sediment
	Virgin Creek	Pathogens
	Wages Creek	Sediment

2

	Carquinez Strait	Copper Nickel PAHs, PBDEs
	Lake Merced	Low Dissolved Oxygen
	Lake Merritt	Low Dissolved Oxygen
	Lakes and Shorelines of San Francisco Bay Region	Trash
	Novato Creek below Stafford Dam	Sedimentation and Siltation
	Pacific Ocean at Baker Beach	High Coliform Count
	Pacific Ocean at San Gregorio Beach	High Coliform Count
	Pacific Ocean at Surfer's Beach	Total Coliform
	Pilarcitos Creek below Pilarcitos Reservoir	Sedimentation and Siltation
	Redwood Creek, tidal portion (San Mateo County)	High Coliform Count
	Richardson Bay	PAHs, PBDEs
	Sacramento-San Joaquin Delta	Copper Nickel PAHs, PBDEs
	San Francisco Bay, Central	

Region	Water Body	Pollutant/Stressor
	San Francisco Bay, Lower	Copper PAHs, PBDEs
	San Francisco Bay, South	Copper Nickel PAHs, PBDEs
	San Pablo Bay	Copper Nickel PAHs, PBDEs
	Suisun Bay	Copper Nickel PAHs, PBDEs
	Urban Creeks of San Francisco Bay Region	Trash
3	Majors Creek	Turbidity
4	Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2)	Unnatural Foam and Scum
	Cold Creek	Algae
	Compton Creek	Trash
	Malibu Creek	Total Selenium
	San Gabriel River Estuary	Trash
	Santa Clara River Reach 8	Organic Enrichment-Low Dissolved
5	American River, Lower	Pathogens
	Arcade Creek	Malathion
	Butte Slough	Malathion Molinate

Region	Water Body	Pollutant/Stressor
		Thiobencarb
	Camanche Reservoir	
		Aluminum
	Colusa Basin Drain	
		Chlorpyrifos Dicamba
	Del Puerto Creek	
		Malathion
	Delta Waterways (Eastern Portion)	
		Pathogens
	Delta Waterways (Stockton Ship Channel)	
		Pathogens
	Feather River	
		Group A Pesticides
	French Camp Slough	
		Pathogens
	Fresno River	
		Nutrients/Pathogens
	Hensley Lake	
		Nutrients/Pathogens
	Ingram/Hospital Creek	
		Carbaryl
	Kaweah River	
		Nutrients/Pathogens
	Kern River	
		Nutrients/Pathogens
	Lake Isabella	
		Nutrients/Pathogens
	Lake Kaweah	
		Nutrients/Pathogens
	Lake Success	
		Nutrients/Pathogens
	Merced River	
		Mercury
	Mormon Slough	
		Diazinon
	Oristamba Creek	
		Methidathion
	Putah Creek, Lower	
		Unknown Toxicity
	Putah Creek, Upper	
		Unknown Toxicity
	Salt Slough	
		Malathion
	San Luis Reservoir	
		Copper

Region	Water Body	Pollutant/Stressor
	Ten Mile River (South fork Kings River)	Nutrients/Pathogens
	Tule River	Nutrients/ Pathogens
	Tuolumne River	Mercury
	Walker Slough	Diazinon
	Yuba River	Pathogens

6

Angora Lake, upper	Pesticides (16 different compounds)
Arrowhead, Lake (was Lake Arrowhead)	Boat fuel constituents (Petroleum Products), nutrients
Asa Lake	Nutrients
Aurora Canyon Creek	Total dissolved solids, nitrogen, phosphorus, mercury
Barney Lake	Nitrogen
Blackwood Creek	Pesticides (4 different compounds)
Blue Lake	Nitrogen
Bonnie Lake	Nitrogen
Buckeye Creek	Phosphorus Total dissolved solids
Carson River, West Fork (headwaters to Woodfords, Woodfords to Paynesville, Paynesville to State Line) (was West Fork Carson River)	sulfate, boron
Chain o Lakes	Nitrogen
Cold Stream	Sediment
Cooney Lake	Nitrogen
Crown Lake	Nitrogen
Deep Creek	

Region	Water Body	Pollutant/Stressor
		Total dissolved solids, sulfate, fluoride
	Desert Creek	
		Sulfate, acid mine drainage
	Diaz Lake	
		Nutrients
	Donner Creek	
		Sediment
	Donner Lake	
		Boat Fuel Constituents (Petroleum Products)
		Pathogens
	Eagle Creek	
		Nitrogen, phosphorus
	Eagle Lake	
		Mercury
	East Lake	
		Nitrogen
	East Walker River above Bridgeport Reservoir	
		Phosphorus, nickel
	East Walker River below Bridgeport Reservoir	
		Fuel oil (spill), mercury, nickel and other metals
	Echo Lake, Lower (was Lower Echo Lake)	
		Nutrients
	Echo Lake, upper	
		Nitrogen
	Emerson Creek	
		Sediment
	Fallen Leaf Lake	
		Nutrients
	Fredericksburg Canyon Creek	
		Sediment
	Fremont Lake	
		Nitrogen
	Frog Lake	
		Nitrogen
	General Creek	
		Pesticides (5 different compounds)
	George, Lake (was Lake George)	
		Metals
	Gilman Lake	
		Nitrogen
	Grass Lake Wetlands	
		Road salt

Region	Water Body	Pollutant/Stressor
	Green Creek	Nitrogen
	Green Creek, above Green Lake	Nitrogen
	Green Lake	Nitrogen
	Griff Creek	Sediment
	Gull Lake	Nitrogen
	Harriet Lake	Nitrogen
	Heavenly Valley Creek, source to USFS boundary and USFS boundary to Trout Creek (was Heavenly Valley Creek)	Nitrogen
	Heenan Reservoir	Nitrogen
	Helen Lake	Nitrogen
	Hidden Valley Creek (was Unnamed creek [aka Hidden Valley Creek])	Chloride Phosphorus
	Hoover Lake	Nitrogen
	Horse Creek	Nitrogen
	Independence Creek	Mercury
	Indian Creek	Phosphorus, nitrogen
	Ivanpah Dry Lake	Radioactive elements (lanthanides)
	June Lake	Nutrients, mercury
	Koenig Lake	Nutrients
	Lassen Creek	Sediment
	Lily Lake	Nutrients
	Little Truckee River	Sediment
	Little Walker River	Sediment, total dissolved solids, nitrogen

Region	Water Body	Pollutant/Stressor
	Littlerock Reservoir	Sediment, iron, manganese
	Lonely Gulch Creek	Sediment
	Long Lake (Lower)	Nitrogen
	Long Lake (Upper)	Nitrogen
	Long Valley Creek	Sediment
	Los Angeles Aqueduct	Copper
	Lundy Lake	Mine drainage (Acid Mine Drainage)
	Madden Creek	Sediment
	Markeeville Creek	Nitrogen, phosphorus, total dissolved solids, chloride
	Martis Creek	Nutrients
	Mary, Lake (was Lake Mary)	Boat fuel constituents, including MTBE (Petroleum Products)
	McGee Creek	Mine drainage (Acid Mine Drainage)
	McKinney Creek	Sediment
	Meeks Creek	Sediment
	Meiss Lake	Nutrients
	Mill Creek	Nitrogen
	Mojave River at Dam Forks	Sulfate
	Mojave River at Lower Narrows	Nutrients
	Mojave River between Upper and Lower Narrows	Chloride PCE and TCE (organic solvents) Sulfate TDS
	Mojave River, Barstow to Waterman Fault	Nitrogen, total dissolved solids

Region	Water Body	Pollutant/Stressor
	Mojave River, West Fork (was West Fork Mojave River)	Nitrogen
	Monitor Creek	Nitrogen, phosphorus
	Peeler Lake	Nitrogen
	Pine Creek	Mine/tailings drainage, sediment Nutrients (nitrogen, phosphorus)
	Raider Creek	Sediment
	Red Lake Creek	Sulfate, acid mine drainage
	Reversed Creek	Sediment, nutrients
	Robinson Creek	Total dissolved solids, phosphorus
	Robinson Creek above Barney Lake	Nitrogen
	Robinson Creek, Barney Lake to Twin Lakes	Nitrogen
	Robinson Creek, Hwy 395 to Bridgeport Reservoir	Nitrogen
	Robinson Lake (Lower)	Nitrogen
	Robinson Lake (Upper)	Nitrogen
	Roosevelt Lake	Nitrogen
	Ruth Lake	Nitrogen
	Sawmill Pond	Sediment
	Scotts Lake	Sediment
	Shake Creek	Total dissolved solids, nitrate, sulfate, boron, fluoride, landfill leachate constituents
	Sherwin Creek	Sediment, nutrients
	Silver Creek	Metals/acid mine drainage
	Silver Lake	

Region	Water Body	Pollutant/Stressor
		Nutrients
	Silverwood Lake	
		Salts, trace elements from imported water (Salinity)
	Snow Lake	
		Nitrogen
	Spring Valley Lake	
		Sediment
	Squaw Creek Meadow Wetlands	
		Pesticides
	Stampede Reservoir	
		Chlordane
		Pesticides (lindane)
	Stella Lake	
		Nitrogen
	Summers Creek	
		Nitrogen, total dissolved solids
	Summit Creek	
		Petroleum products
	Summitt Lake	
		Nitrogen
	Susan River downstream of Susanville	
		Mercury
		Nickel
		PCBs
	Susan River upstream of Susanville	
		Mercury
		Nickel
	Swauger Creek	
		Total dissolved solids, nitrogen
	Tahoe Keys Sailing Lagoon	
		PCBs
		Toxaphene
	Tahoe, Lake (was Lake Tahoe)	
		Boat fuel constituents (Petroleum Products)
		Iron
		Lead in sediment
		Mercury in sediment
		Pesticides (40 different compounds)
	Taylor Creek	
		Pesticides (8 different compounds)
	Tower Lake	
		Nitrogen
	Truckee River	
		Chloride
		TDS

Region	Water Body	Pollutant/Stressor
	Truckee River, upper (above and below Christmas Valley) (was Upper Truckee River)	Pesticides (7 different compounds), nitrogen
	Trumbull Lake	Nitrogen
	Twin Lake, Lower (was Lower Twin Lake)	Nutrients
	Twin Lake, Upper (was Upper Twin Lake)	Nutrients
	Virginia Creek	Nitrogen, phosphorus, sediment, total dissolved solids
	Virginia Lake (Upper)	Nitrogen
	Watson Creek	Sediment
	West Walker River	Total dissolved solids, nitrogen

8

Anaheim Bay	Metals and Pesticides
Bolsa Chica	Metals
Chino Creek, Reach 1 and Reach 2	Metals
Cucamonga Creek, Mountain Reach	Metals
Huntington Harbour	Metals and pesticides
Mill Creek (Prado Area)	Metals
Newport Bay, Upper (was Upper Newport Bay)	Trash
San Jacinto River North Fork (Reach 7)	Metals
San Jacinto River South Fork (Reach 7)	Salinity, Total Dissolved Solids
Santa Ana River (Reaches 4 and 5)	Metals
Santa Ana River, Reach 1	Trash
Strawberry Creek	Salinity, total dissolved solids

Region	Water Body	Pollutant/Stressor
9	Temescal Creek	Metals
	Agua Hedionda Creek	Benthic Community Degradation Diazinon Eutrophication Incised Channel
	Agua Hedionda Lagoon	Copper (dissolved) Selenium
	Aliso Creek	Chlordane Dieldrin Heptachlorepoide PCBs
	Alvarado Creek	Benthic Community Degradation Eutrophication Sedimentation/Siltation Trash
	Beach and Bay Shorelines displaying a permanent health risk sign	Unknown constituents that may effect human health
	Boulder Creek	Exotic Vegetation (Tamarisk sp.) Hydromodification (scour from reservoir release)
	Buena Vista Creek	Benthic Community Degradation Eutrophication
	Chocolate Creek	Eutrophication Sedimentation/Siltation
	Chollas Creek	Total Chlordane Total PCBs Trash Turbidity
	Cloverdale Creek	Eutrophication Sedimentation/Siltation
	Cottonwood Creek	Diazinon Eutrophication Exotic Vegetation (Tamarisk sp.) Hydromodification (scour from reservoir release)

Region	Water Body	Pollutant/Stressor
	Deluz Creek	Sulfate Total Dissolved Solids
	Delzura Creek	Erosion, Incised Channel Eutrophication Sedimentation/Siltation
	Encinitas Creek	Diazinon Eutrophication Malathion
	Escondido Creek	Benthic Community Degradation Diazinon Eutrophication Sulfate Total Dissolved Solids
	Fallbrook Creek	Iron Manganese Phosphorus
	Famosa Slough and Channel (was Famosa Slough)	Dieldrin Total Chlordane Total DDT Total PCB
	Forester Creek (was "Forrester Creek")	Eutrophication Trash
	Green Valley Creek	Benthic Community Degradation Eutrophication Phosphorus Sedimentation/Siltation Trash
	Hatfield Creek	Eutrophication Incised Channel
	Hodges, Lake (was Lake Hodges [was Hodges Reservoir])	MTBE
	King Creek	Eutrophication
	Laguna Lakes	Bacterial Indicators
	Loma Alta Creek	Benthic Community Degradation Eutrophication

Region	Water Body	Pollutant/Stressor
	Los Penasquitos Creek	Sedimentation/Siltation
	Murray Reservoir	Bromodichloromethane Phosphorus Sodium
	Murrieta Creek	Iron Manganese Total Dissolved Solids
	Oceanside Harbor	Copper (dissolved)
	Oso Creek	Chloride Phosphorus Sulfate Total Dissolved Solids Turbidity
	Otay Reservoir, Lower (was Lower Otay Reservoir)	Color Odor
	Pacific Ocean Shoreline, Miramar Reservoir HA (was Miramar Reservoir)	Bromodichloromethane Total Dissolved Solids
	Padre Barona Creek	Eutrophication Incised Channel
	Prima Deshecha Creek (was Prima Deshecha Channel)	Cadmium Nickel
	Proctor Valley Creek	Trash
	Rainbow Creek	Sediment Toxicity Sulfate Total Dissolved Solids Trash
	Reidy Creek	Nitrogen Phosphorus
	Rose Creek	Sedimentation/Siltation
	San Diego Bay Shoreline, at America's Cup Harbor (was San Diego Bay at America's Cup Harbor)	Copper (dissolved)

Region	Water Body	Pollutant/Stressor
	San Diego Bay Shoreline, at Harbor Island (East Basin) (was San Diego Bay at Harbor Island [East Basin])	Arsenic Cadmium Copper (dissolved)
	San Diego Bay Shoreline, at Harbor Island (West Basin) (was San Diego Bay at Harbor Island [West Basin])	Copper (dissolved)
	San Diego Bay Shoreline, at Laurel Street (was San Diego Bay at Laurel Street)	Arsenic Cadmium Copper (dissolved)
	San Diego Bay Shoreline, at Marriott Marina (was San Diego Bay at Marriott Marina)	Copper (dissolved)
	San Diego Bay Shoreline, at North Island Aircraft Platform (was San Diego Bay at North Island Aircraft Platform)	Arsenic Cadmium Copper (dissolved)
	San Diego Bay Shoreline, at South Bay Power Plant (was San Diego Bay at South Bay Power Plant)	Chlorine, Copper, Zinc Thermal Warming Turbidity
	San Diego Bay Shoreline, Shelter Island Yacht Basin (was San Diego Bay at Shelter Island Yacht Harbor)	Arsenic Cadmium
	San Diego River (upper and lower) (was San Diego River)	Benthic Community Degradation Benzene Chlordane Eutrophication Exotic Vegetation (Water Hyacinth, Arundo sp., Tamarisk sp.) Methyl Tertiary-butyl Ether (MTBE) Trash
	San Juan Creek	Erosion Incised Channel PCBs Sedimentation/Siltation

Region	Water Body	Pollutant/Stressor
	San Luis Rey River	Eutrophication Magnesium Phosphorus
	San Marcos Lake	Dissolved oxygen
	San Mateo Creek	Introduced (non-native) Amphibian Species: Bullfrogs Introduced (non-native) Fish Species: Black Bullhead, Bluegill, Channel Catfish, Green Sunfish, Largemouth Bass, Mosquito Fish. Introduced (non-native) Invertebrate Species: Non-native Crayfish Introduced (non-native) Plant Species: Saltcedar, Other Exotic Vegetation Total Dissolved Solids
	Sandia Creek (was Sandia Canyon)	Lead Sulfate
	Santa Margarita River (entire and tributaries)	Sedimentation/Siltation
	Santa Margarita River (Lower)	Iron Manganese Sulfate Total Dissolved Solids
	Santa Margarita River (Upper)	Iron Manganese Sulfate Total Dissolved Solids
	Santa Maria Creek	Bacterial Indicators Exotic Vegetation (Tamarisk sp.)
	Santa Ysabel Creek	Exotic Vegetation (Arundo sp. and Tamarisk sp.)
	Scove Creek	Bacterial Indicators Incised Channel Nutrients
	Sorrento (Carroll Canyon) Valley Creek	Eutrophication
	Sycamore Canyon Creek	Eutrophication Exotic Vegetation (Arundo donax) Phosphorus

Region	Water Body	Pollutant/Stressor
		Trash
	Tecolote Creek	
		Sedimentation/Siltation
	Tijuana River Estuary	
		Turbidity

Table 8: Changes in Presentation of Water Bodies on the 1998 Section 303(d) List Versus the Proposed 2002 Section 303(d) List

Region	1998 Section 303(d) List	2002 Proposed Section 303(d) List
1	Region 1 303(d) listed water bodies are now presented as watersheds rather than individual segments. Each 303(d) listed water body for Region 1 is now named as: the first name is the river mainstem or lake and the second and third parts of the name are the watershed and sub-watershed names.	
1	Eel River Delta—Estuary	River
1	Estero de San Antonio	Stemple Creek/Estero de San Antonio, Bodega HU, Estero de San Antonio HA
1	Klamath River	Klamath River watershed has been broken into smaller areas to reflect the watersheds of the tributaries. The watersheds are: Klamath River, Klamath River HU, Butte Valley HA Klamath River, Klamath River HU, Lost River HA, Clear Lake, Boles HSAs Klamath River, Klamath River HU, Lost River HA, Tule Lake and Mt Dome HSAs Klamath River, Klamath River HU, Lower HA, Klamath Glen HSA Klamath River, Klamath River HU, Middle HA, Iron Gate Dam to Scott River Klamath River, Klamath River HU, Middle HA, Oregon to Iron Gate Klamath River, Klamath River HU, Middle HA, Scott River to Trinity River Klamath River, Klamath River HU, Salmon River HA
1	Russian River-- Comments shown on the 1998 list indicated that the listing covered the entire watershed, mainly tributaries.	Russian River watershed has been broken into smaller areas to reflect the watersheds of the tributaries. The watersheds are: Russian River, Russian River HU, Lower Russian River, Austin Creek HSA Russian River, Russian River HU, Lower Russian River HA, Guerneville HSA Russian River, Russian River HU, Middle Russian River HA, Dry Creek HSA Russian River, Russian River HU, Middle Russian River HA, Geyserville HSA Russian River, Russian River HU, Middle Russian River HA, Mark West Creek HSA Russian River, Russian River HU, Upper Russian River HA, Coyote Valley HSA Russian River, Russian River HU, Upper Russian River HA, Forsythe Creek HSA Russian River, Russian River HU, Upper Russian River HA, Ukiah HSA

Region	1998 Section 303(d) List	2002 Proposed Section 303(d) List
1	Trinity River- Comments shown on the 1998 list indicated that the listing covered Trinity River (upper), Trinity River (Middle), and Trinity River (Lower).	Trinity River watershed has been broken into smaller areas that reflect the watersheds of the tributaries. The subdivisions are: Trinity River, Trinity River HU, Lower Trinity HA Trinity River, Trinity River HU, Middle HA Trinity River, Trinity River HU, Upper HA
1	Tomki Creek	Eel River, Eel River HU, Upper Main Fork (Includes Tomki Creek)
2	Laurel Creek	Laurel Creek (Solano Co)
2	Merritt Lake	Lake Merritt
2	Pescadero Creek (REG 2)	Pescadero Creek
2	Pine Creek	Pine Creek (Contra Costa Co)
2	San Antonio Creek (REG 2)	San Antonio Creek (Marin/Sonoma Co)
2	San Leandro Creek	San Leandro Creek, Lower
2	Suisun Slough--(River)	Estuary
3	Bear Creek (R3)	Bear Creek (Santa Cruz County)
3	Clear Creek (R3)	Clear Creek (San Benito Co)
3	Espinosa Slough-- (Wetland)	River
3	Monterey Bay South	Monterey Bay South (Coastline)
3	Pacific Ocean at Point Rincon	Pacific Ocean at Point Rincon (mouth of Rincon Creek, Santa Barbara Co)
3	Salinas River-	Salinas River (lower, estuary to near Gonzales Rd crossing in watershed 309.10 and 309.20) Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)
3	San Antonio Creek (Santa Barbara County)	San Antonio Creek (South Coast Watershed)
3	San Lorenzo River Estuary	San Lorenzo River Lagoon
3	Schwan Lake--(Wetland)	Lake
3	Soquel Lagoon--(Wetland)	Estuary
3	Tembladero Slough--(Wetland)	River
3	Watsonville Slough--(Estuary)	River
4	Arroyo Seco Reach 2 (West Holly Ave to Devils Gate Dam)	Arroyo Seco Reach 2 (Figueroa St. to Riverside Drive)
4	McGrath Lake Estuary	McGrath Lake
4	Mugu Lagoon	Calleguas Creek Reach 1
4	Santa Clara River Reach 3 (Dam to above SP Creek/BLW timber cyn)	Santa Clara River Reach 3 (Freeman Diversion to A Street)
The following are changes for the Calleguas Creek Watershed:		
4	Calleguas Creek Reach 1	Calleguas Creek Reach 2
4	Calleguas Creek Reach 2	Calleguas Creek Reach 2
4	Calleguas Creek Reach 3	Calleguas Creek Reach 3
4	Revolon Slough Main Branch: Mugu Lagoon to Central Avenue	Calleguas Creek Reach 4

Region	1998 Section 303(d) List	2002 Proposed Section 303(d) List
4	Beardsley Channel	Calleguas Creek Reach 5
4	Arroyo Las Posas Reaches 1 and 2	Calleguas Creek Reach 6
4	Arroyo Simi Reaches 1 and 2	Calleguas Creek Reach 7
4	Tapo Canyon Reach 1	Calleguas Creek Reach 8
4	Conejo Creek Reach 1	Calleguas Creek Reach 9A Calleguas Creek Reach 9B
4	Conejo Creek Reach 2	Calleguas Creek Reach 9B Calleguas Creek Reach 10
4	Conejo Creek Reach 3	Calleguas Creek Reach 10 Calleguas Creek Reach 11 Calleguas Creek Reach 13
4	Conejo Creek/Arroyo Conejo North Fork	Calleguas Creek Reach 10 Calleguas Creek Reach 12
4	Conejo Creek Reach 4	Calleguas Creek Reach 13
		End of Changes to Calleguas Creek Watershed
4	Fox Barranca	Fox Barranca (tributary to Calleguas Creek Reach 6)
4	LA Fish Harbor	Los Angeles Fish Harbor
4	LA Harbor Consolidated Slip	Los Angeles Consolidated Slip
4	LA Harbor Inner Breakwater	Los Angeles Harbor Inner Breakwater
4	LA Harbor Main Channel	Los Angeles Harbor Main Channel
4	LA Harbor Southwest Slip	Los Angeles Southwest Slip
4	Ventura River Reach 1 (Estuary to Main Street)	Ventura River Reach 1 and 2 (Estuary to Weldon Canyon)
4	Ventura River (Main Street to Weldon Canyon)	Ventura River Reach 1 and 2 (Estuary to Weldon Canyon)
5	American River, Lower	American River, Lower (Nimbus Dam to confluence with Sacramento River)
5	Cache Creek	Cache Creek, Lower (Clear Lake Dam to Cache Creek Settling Basin near Yolo Bypass)
5	Colusa Drain	Colusa Basin Drain
5	Delta Waterways	Delta Waterways (eastern portion) Delta Waterways (western portion) Delta Waterways (Stockton Ship Channel)
5	Dunn Creek	Dunn Creek (Mt Diablo Mine to Marsh Creek)
5	Feather River, Lower	Feather River, Lower (Lake Oroville Dam to confluence with Sacramento River)
5	Five Mile Slough	Five Mile Slough (Alexandria Place to Fourteen Mile Slough)
5	Harding Drain (Turlock Irr Dist lateral #5)	Harding Drain (Turlock Irrigation District lateral #5)
5	Horse Creek	Horse Creek (Rising Star Mine to Shasta Lake)
5	Keswick Reservoir	Keswick Reservoir (portion downstream from Spring Creek)
5	Kings River (Lower)	Kings River, Lower (Island Weir to Stinson and Empire Weirs)
5	Little Backbone Creek	Little Backbone Creek, Lower
5	Little Cow Creek	Little Cow Creek (downstream from Afterthought Mine)
5	Marsh Creek	Marsh Creek (Dunn Creek to Marsh Creek Reservoir) Marsh Creek (Marsh Creek Reservoir to San Joaquin River)
5	Merced River, Lower	Merced River, Lower (McSwain Reservoir to San Joaquin River)

Region	1998 Section 303(d) List	2002 Proposed Section 303(d) List
5	Mosher Slough	Mosher Slough (downstream of I-5) Mosher Slough (upstream of I-5)
5	Natomas East Main Drain	Natomas East Main Drainage Canal (aka Steelhead Creek, downstream of confluence with Arcade Creek) Natomas East Main Drainage Canal (aka Steelhead Creek, upstream of confluence with Arcade Creek)
5	Orestimba Creek	Orestimba Creek (above Kilburn Road) Orestimba Creek (below Kilburn Road)
5	Panoche Creek	Panoche Creek (Silver Creek to Belmont Avenue)
5	Sacramento River (Red Bluff to Delta)	Sacramento River (Red Bluff to Knights Landing) Sacramento River (Knights Landing to Delta)
5	Sacramento River (Shasta Dam to Red Bluff)	Sacramento River (Keswick Dam to Cottonwood Creek) Sacramento River (Cottonwood Creek to Red Bluff)
5	Salt Slough	Salt Slough (upstream from confluence with San Joaquin River.)
5	San Carlos Creek	San Carlos Creek (downstream of New Idria Mine)
5	San Joaquin River	San Joaquin River (Mendota Pool to Bear Creek) San Joaquin River (Bear Creek to Mud Slough) San Joaquin River (Mud Slough to Merced River) San Joaquin River (Merced River to South Delta Boundary)
5	Shasta Lake	Shasta Lake (area where West Squaw Creek enters)
5	Spring Creek	Spring Creek, Lower (Iron Mountain Mine to Keswick Reservoir)
5	Stockton Deep Water Channel	Stockton Deep Water Channel, Upper (Port Turning Basin)
5	Sulfur Creek	Sulphur Creek (Colusa County)
5	Tuolumne River (Lower)	Tuolumne River, Lower (Don Pedro Reservoir to San Joaquin River)
5	West Squaw Creek	West Squaw Creek (below Balaklala Mine)
5	Willow Creek (Whiskeytown)	Willow Creek (Shasta County, below Greenhorn Mine to Clear Creek)
5	Whiskeytown Res	Whiskeytown Reservoir (areas near Oak Bottom, Brandy Creek Campgrounds and Whiskeytown)
6	Bear Creek (R6)	Bear Creek (Placer County)
6	Cottonwood Creek (1)	Cottonwood Creek (below LADWP diversion)
6	Eagle Lake (2)	Eagle Lake (Lassen County)
6	East Walker River	East Walker River, above Bridgeport Reservoir East Walker River, below Bridgeport Reservoir
6	Gray Creek (R6)	Gray Creek (Nevada County)
6	Heavenly Valley Creek	Heavenly Valley Creek (source to USFS boundary) Heavenly Valley Creek (USFS boundary to Trout Creek)
6	Horseshoe Lake (2)	Horseshoe Lake (San Bernardino County)
6	Indian Creek (1)	Indian Creek (Alpine County)
6	Mill Creek (1)	Mill Creek (Mono County)
6	Mill Creek (3)	Mill Creek (Modoc County)
6	Owens River	Owens River (Long HA) Owens River (Lower)

Region	1998 Section 303(d) List	2002 Proposed Section 303(d) List
		Owens River (Upper)
6	Pine Creek (2)	Pine Creek (Lassen County)
6	Twin Lakes	Twin Lakes (Owens HU)
6	Wolf Creek (1)	Wolf Creek (Alpine County)
7	New River (R7)	New River (Imperial)
8	Upper Newport Bay Ecological Reserve	Newport Bay, Upper (Ecological Reserve)
9	Aliso Creek Mouth of Orange	Aliso Creek (mouth)
9	Pacific Ocean, Buena Vista HA 904.20	Pacific Ocean Shoreline, Buena Vista Creek HA
9	San Diego Bay	San Diego Bay Shoreline, 32nd St San Diego Naval Station
		San Diego Bay Shoreline, between Sampson and 28th Streets
		San Diego Bay Shoreline, Downtown Anchorage
		San Diego Bay Shoreline, near Chollas Creek
		San Diego Bay Shoreline, near Coronado Bridge
		San Diego Bay Shoreline, near sub base
		San Diego Bay Shoreline, near Switzer Creek
		San Diego Bay Shoreline, North of 24th Street Marine Terminal
		San Diego Bay Shoreline, Seventh Street Channel
		San Diego Bay, Shelter Island Yacht Basin
		San Diego Bay Shoreline, Vicinity of B St and Broadway Piers
9	San Juan Creek Lower	San Juan Creek

Page left blank intentionally.

Appendix: 1998 California 303(d) List and TMDL Priority Schedule

Please Note: For clarity, the additions, deletions, changes, priorities, and schedules presented in Tables 1, 2, 3, and 4 have not been incorporated into the Appendix. A draft final 2002 section 303(d) list with all the proposed changes is available.

Page left blank intentionally.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
1	E	EEL RIVER DELTA	111.110	Sedimentation/Siltation	Nonpoint Source Range Land Silviculture	Low	6350	Acres	0204	1206
				Temperature	Nonpoint Source	Low	6350	Acres	0204	1206
1	E	ESTERO AMERICANO	115.300	Nutrients		Medium	692	Acres	0497	0206
				<i>Water Quality Attainment strategy is attempting to increase voluntary measures for attainment of standards and objectives, as was done in the Estero de San Antonio / Stemple Creek TMDL Water Quality Attainment Strategy, adopted by the North Coast Regional Water Quality Control Board at the December 11, 1997 meeting.</i>						
				Manure Lagoons Pasture Land						
				Sedimentation/Siltation		Medium	692	Acres	0497	0206
				<i>Water Quality Attainment strategy is attempting to increase voluntary measures for attainment of standards and objectives, as was done in the Estero de San Antonio / Stemple Creek TMDL Water Quality Attainment Strategy, adopted by the North Coast Regional Water Quality Control Board at the December 11, 1997 meeting.</i>						
				Erosion/Siltation Hydromodification Nonpoint Source Removal of Riparian Vegetation Riparian Grazing Streambank Modification/Destabilization						
1	E	NAVARRO RIVER DELTA	113.500	Sedimentation/Siltation		Medium	20	Acres	0298	1200
				Erosion/Siltation						
1	L	LAKE PILLSBURY	111.630	Mercury		Low	2280	Acres	1209	1211
				Natural Sources						
1	R	ALBION RIVER	113.400	Sedimentation/Siltation		Medium	14	Miles	0299	1201
				<i>USEPA is preparing TMDL for Albion River.</i>						
				Nonpoint Source Silviculture						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
1	R	AMERICANO CREEK	115.300	Nutrients (See Estero Americano)	Animal Operations Dairies Manure Lagoons Pasture Land Riparian Grazing Upland Grazing	Medium	7	Miles	0497	0206
1	R	BIG RIVER	113.300	Sedimentation/Siltation Nonpoint Source Silviculture		Medium	40	Miles	0299	1201
1	R	EEL RIVER, MIDDLE FORK	111.700	Sedimentation/Siltation USEPA will develop a TMDL for Eel River, Middle Fork. Erosion/Siltation		Low	64	Miles	0201	1203
				Temperature USEPA will develop a TMDL for Eel River, Middle Fork. Nonpoint Source		Low	64	Miles	0201	1203
1	R	EEL RIVER, MIDDLE MAIN FORK	111.70	Sedimentation/Siltation USEPA will develop a TMDL for Eel River, Middle Main Fork. Nonpoint Source Range Land Silviculture		Low	1075.38	Miles	0203	1205
				Temperature USEPA will develop a TMDL for Eel River, Middle Main Fork. Nonpoint Source		Low	1075.38	Miles	0203	1205
1	R	EEL RIVER, NORTH FORK	111.500	Sedimentation/Siltation USEPA will develop TMDL for Eel River, North Fork Erosion/Siltation Logging Road Construction/Maintenance Nonpoint Source Silviculture		Low	41	Miles	0200	1202
				Temperature USEPA will develop TMDL for Eel River, North Fork. Nonpoint Source		Low	41	Miles	0200	1202

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
1	R	EEL RIVER, SOUTH FORK	111.300	Sedimentation/Siltation		Low	85	Miles	0297	1299
				USEPA is developing TMDL for Eel River, South Fork. Sediment and temperature TMDLs will be developed for: (1) the area tributary to and including the South Fork of the Eel River above Garberville and (2) the area tributary to and including the South For of the Eel River below Garberville.						
				Erosion/Siltation						
				Flow Regulation/Modification						
				Hydromodification						
				Logging Road Construction/Maintenance						
				Nonpoint Source						
				Range Land						
				Removal of Riparian Vegetation						
				Resource Extraction						
				Silviculture						
				Temperature		Low	85	Miles	0297	1299
				USEPA is developing TMDL for Eel River, South Fork.						
				Erosion/Siltation						
				Flow Regulation/Modification						
				Hydromodification						
				Nonpoint Source						
				Removal of Riparian Vegetation						
1	R	EEL RIVER, UPPER MAIN FORK	111.60	Sedimentation/Siltation		Low	1154.24	Miles	0202	1204
				USEPA will develop a TMDL for Eel River, Upper Main Fork.						
				Nonpoint Source						
				Range Land						
				Silviculture						
				Temperature		Low	1154.24	Miles	0202	1204
				USEPA will develop a TMDL for Eel River, Upper Main Fork.						
				Nonpoint Source						
1	R	ELK RIVER	110.000	Sedimentation/Siltation		Medium	87.53	Miles	0207	2009
				Sedimentation, threat of sedimentation, impaired irrigation water quality, impaired domestic supply water quality, impaired spawning habitat, increased rate and depth of flooding due to sediment, property damage. Regional Water Board and California Department of Forestry staff are involved in ongoing efforts to attain adherence to Forest Practice Rules. It is possible that compliance will bring attainment prior to TMDL development.						
				Erosion/Siltation						
				Harvesting, Restoration, Residue Management						
				Logging Road Construction/Maintenance						
				Nonpoint Source						
				Removal of Riparian Vegetation						
				Silviculture						
				Streambank Modification/Destabilization						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
1	R	FRESHWATER CREEK	110.000	Sedimentation/Siltation		Medium	72.67	Miles	0208	1210
				Sedimentation, threat of sedimentation, impaired irrigation water quality, impaired domestic supply water quality, impaired spawning habitat, increased rate and depth of flooding due to sediment, property damage. Regional Water Board and California Department of Forestry staff are involved in ongoing efforts to attain adherence to Forest Practice Rules. It is possible that compliance will bring attainment prior to TMDL development.						
				Erosion/Siltation						
				Harvesting, Restoration, Residue Management						
				Logging Road Construction/Maintenance						
				Nonpoint Source						
				Silviculture						
1	R	GARCIA RIVER	113.700	Sedimentation/Siltation		High	39	Miles	0997	1297
				The Regional Water Board is involved in extended public hearings to consider the adoption of a TMDL for sediment control on the Garcia River. In January, 1998, USEPA issued public notice for adoption and promulgation of a TMDL for sediment on the Garcia River.						
				Channel Erosion						
				Erosion/Siltation						
				Harvesting, Restoration, Residue Management						
				Logging Road Construction/Maintenance						
				Nonpoint Source						
				Removal of Riparian Vegetation						
				Riparian Grazing						
				Silviculture						
				Streambank Modification/Destabilization						
				Temperature		High	39	Miles	0298	2000
				Elevated temperatures impacting coldwater fisheries in these reaches and sub-areas: Planning Units 113.70010 (Pardaloe Creek), 113.70011, 12, 13, 14, 20, 21, and the entire mainstem Garcia River from Pardaloe Creek to the estuary, which includes that portion of 113.70022, 23, 24, 25, and 26. February 1998 - The Regional Water Board is working to adopt a TMDL for sediment on the Garcia River. It is possible that voluntary compliance with measures in this TMDL will improve conditions related to temperature prior to development of a TMDL for temperature.						
				Habitat Modification						
				Nonpoint Source						
				Removal of Riparian Vegetation						
				Streambank Modification/Destabilization						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
1	R	GUALALA RIVER	113.800	Sedimentation/Siltation	Disturbed Sites (Land Develop.) Erosion/Siltation Harvesting, Restoration, Residue Management Land Development Logging Road Construction/Maintenance Nonpoint Source Road Construction Silviculture Specialty Crop Production	Medium	35	Miles	0499	1201
1	R	KLAMATH RIVER	105.000	Nutrients	<i>Nutrient TMDLs will be developed for the area tributary to and including:</i> Clear Lake Reservoir Area Lost River/Tule Lake to Oregon border Oregon border to iron Gate dam Iron Gate Dam to Scott River Scott River to Trinity River Trinity River to the Ocean	Medium	190	Miles	0402	0404
				Org. enrichment/Low D.O.	<i>Dissolved oxygen levels do not meet Basin Plan Objective. Fisheries habitat is impaired due to low dissolved oxygen levels. Dissolved Oxygen TMDL will be developed for the mainstem of the Klamath River.</i>	Medium	180	Miles	0202	1204
				Temperature	<i>Temperature TMDLs will be developed for the area tributary to and including:</i> Clear Lake Reservoir Area Lost River/Tule Lake to Oregon border Oregon border to iron Gate dam Iron Gate Dam to Scott River Scott River to Trinity River Trinity River to the Ocean	Medium	190	Miles	0402	0404

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
1	R	MAD RIVER	109.000	Sedimentation/Siltation		Low	90	Miles	0205	0207
				USEPA will develop TMDL for the Mad River. Sediment TMDLs will be developed for the area tributary to and including: (1) the Mad River (North Fork), (2) the Mad River(Upper), and (3) the Mad River (Middle).						
				Nonpoint Source						
				Resource Extraction						
				Silviculture						
				Turbidity		Low	90	Miles	0205	0207
				Turbidity TMDLs will be developed for the area tributary to and including: (1) the Mad River (North Fork), (2) the Mad River(Upper), and (3) the Mad River (Middle).						
				Nonpoint Source						
				Resource Extraction						
				Silviculture						
1	R	MATTOLE RIVER	112.300	Sedimentation/Siltation		Medium	56	Miles	0200	1202
				Erosion/Siltation						
				Habitat Modification						
				Hydromodification						
				Nonpoint Source						
				Range Land						
				Removal of Riparian Vegetation						
				Riparian Grazing						
				Silviculture						
				Specialty Crop Production						
				Streambank Modification/Destabilization						
				Temperature		Medium	56	Miles	0200	1202
				Habitat Modification						
				Nonpoint Source						
				Removal of Riparian Vegetation						
				Silviculture						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
1	R	NAVARRO RIVER	113.500	Sedimentation/Siltation		Medium	25	Miles	0298	1200
				Sediment TMDLs will be developed for: (1) the area tributary to and including the Navarro River above Philo and (2) the area tributary to and including the Navarro River below Philo.						
				Agriculture						
				Agriculture-grazing						
				Channel Erosion						
				Construction/Land Development						
				Disturbed Sites (Land Develop.)						
				Drainage/Filling Of Wetlands						
				Erosion/Siltation						
				Flow Regulation/Modification						
				Habitat Modification						
				Harvesting, Restoration, Residue Management						
				Highway/Road/Bridge Construction						
				Irrigated Crop Production						
				Land Development						
				Logging Road Construction/Maintenance						
				Nonirrigated Crop Production						
				Nonpoint Source						
				Range Land						
				Removal of Riparian Vegetation						
				Resource Extraction						
				Riparian Grazing						
				Road Construction						
				Silvicultural Point Sources						
				Silviculture						
				Specialty Crop Production						
				Streambank Modification/Destabilization						
				Upland Grazing						
				Water Diversions						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Temperature		Medium	25	Miles	0298	1200
				Temperature TMDLs will be developed for: (1) the area tributary to and including the Navarro River above Philo and (2) the area tributary to and including the Navarro River below Philo.						
				Agricultural Return Flows						
				Agricultural Water Diversion						
				Agriculture						
				Drainage/Filling Of Wetlands						
				Flow Regulation/Modification						
				Habitat Modification						
				Nonpoint Source						
				Removal of Riparian Vegetation						
				Resource Extraction						
				Streambank Modification/Destabilization						
				Water Diversions						
1	R	NOYO RIVER	113.200	Sedimentation/Siltation		Medium	35	Miles	0698	1299
				Nonpoint Source						
				Silviculture						
1	R	REDWOOD CREEK	107.000	Sedimentation/Siltation		Low	63	Miles	0497	1298
				Sediment TMDLs are being developed for: (1) the area tributary to and including the mainstem upstream of the Redwood National Park boundary and (2) for the area tributary to and including the mainstem within the Park boundary.						
				Nonpoint Source						
				Range Land						
				Silviculture						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
1	R	RUSSIAN RIVER	114.100	Sedimentation/Siltation		Medium	105	Miles	0209	1211
				<i>[Entire watershed, mainly tributaries.]</i> <i>Sedimentation, threat of sedimentation, siltation, turbidity, bank erosion impaired spawning and rearing habitat, increased rate and depth of flooding due to sediment, property damage, in Russian River and tributaries.</i> <i>Aggradation in the main stem Russian River. Sonoma County Water Agency has begun a comprehensive Endangered Species Act habitat assessment. This project should arrive at assessment and control measures equivalent to TMDL allocation and attainment strategies.</i>						
				Agriculture-storm runoff Channel Erosion Channelization Construction/Land Development Disturbed Sites (Land Develop.) Drainage/Filling Of Wetlands Erosion/Siltation Flow Regulation/Modification Habitat Modification Harvesting, Restoration, Residue Management Highway/Road/Bridge Construction Hydromodification Land Development Logging Road Construction/Maintenance Nonpoint Source Other Urban Runoff Removal of Riparian Vegetation Riparian Grazing Road Construction Silviculture Specialty Crop Production Streambank Modification/Destabilization Upland Grazing						
1	R	SCOTT RIVER	105.400	Sedimentation/Siltation		Low	68	Miles	0203	0405
				Irrigated Crop Production Mine Tailings Nonpoint Source Pasture Land Resource Extraction Silviculture						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Temperature		Low	68	Miles	0203	0405
					Agricultural Return Flows Drainage/Filling Of Wetlands Habitat Modification Irrigated Crop Production Nonpoint Source Pasture Land Removal of Riparian Vegetation Silviculture Streambank Modification/Destabilization Water Diversions					
1	R	SHASTA RIVER	105.500							
				Org. enrichment/Low D.O.		Low	52	Miles	0203	0905
					Agricultural Return Flows Flow Regulation/Modification Riparian Grazing					
				Temperature		Low	52	Miles	0203	0905
					Agricultural Water Diversion Agriculture-irrigation tailwater Drainage/Filling Of Wetlands Habitat Modification Nonpoint Source Removal of Riparian Vegetation Water Diversions					
1	R	STEMPLE CREEK	115.400							
				Nutrients		Low	17	Miles	0496	0498
				<i>This water body/pollutant was relisted by USEPA.</i>						
					Manure Lagoons Nonpoint Source Pasture Land					
1	R	TEN MILE RIVER	113.130							
				Sedimentation/Siltation		Low	10	Miles	0298	1200
				<i>USEPA is developing TMDL for Ten Mile River.</i>						
					Nonpoint Source Silviculture					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
1	R	TOMKI CREEK	111.620	Sedimentation/Siltation		Medium	18	Miles	0202	1204
				USEPA will develop TMDL's for Eel River Watershed in the Tomki Creek vicinity. Tomki Creek, tributary to the Eel River, has been listed under Clean Water Act Section 303(d) due to the effects of sedimentation. Restoration effort has targeted the riparian area. Tomki Creek is under consideration for removal from the 303(d) list.						
				Erosion/Siltation						
				Nonpoint Source						
				Range Land						
				Silviculture						
1	R	TRINITY RIVER	106.000	Sedimentation/Siltation		Medium	170	Miles	0199	1201
				USEPA will develop TMDL for Trinity River. Sediment TMDLs will be developed for the area tributary to and including: (1) the Trinity River (Upper), (2) the Trinity River (Middle), and (3) the Trinity River (Lower).						
				Mine Tailings						
				Nonpoint Source						
				Range Land						
				Resource Extraction						
				Silviculture						
1	R	TRINITY RIVER, SOUTH FORK	106.200	Sedimentation/Siltation		Low	80	Miles	0397	1298
				USEPA will be developing TMDL for South Fork Trinity River. Sediment TMDLs will be developed for: (1) areas tributary to and including Hayfork/Corral Creeks and (2) areas tributary to and including the South Fork of the Trinity River except Hayfork/Corral Creeks						
				Nonpoint Source						
				Riparian Grazing						
				Silviculture						
				Temperature		Low	80	Miles	0206	1208
				Elevated temperatures impact coldwater fisheries. USEPA will be developing TMDL for South Fork Trinity River.						
				Habitat Modification						
				Removal of Riparian Vegetation						
				Riparian Grazing						
				Streambank Modification/Destabilization						
				Water Diversions						
1	R	VAN DUZEN RIVER	111.200	Sedimentation/Siltation		Low	63	Miles	0297	1299
				USEPA is developing TMDL for Van Duzen River. Sediment TMDLs will be developed for: (1) areas tributary to and including Yager Creek, (2) areas tributary to and including the Van Duzen River above Bridgeville, and (3) areas tributary to and including the Van Duzen River below Bridgeville.						
				Erosion/Siltation						
				Nonpoint Source						
				Range Land						
				Silviculture						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
2	B	CARQUINEZ STRAIT	207.100	Chlordane		Low	6560	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Copper		Medium	6560	Acres	2003	2008
				Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.						
				Atmospheric Deposition						
				Municipal Point Sources						
				Other						
				Urban Runoff/Storm Sewers						
				DDT		Low	6560	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Diazinon		Medium	6560	Acres	2000	2005
				Diazinon levels cause water column toxicity. Two patterns: pulses through riverine systems linked to agricultural application in late winter and pulse from residential land use areas linked to homeowner pesticide use in late spring, early summer. Chlorpyrifos may also be the cause of toxicity; more data needed, however.						
				Nonpoint Source						
				Dieldrin		Low	6560	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Dioxin compounds*		High	6560	Acres		
				* The specific compounds are: 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 1,2,3,4,7,8-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,4,6,7,8-HpCDD, and OCDD.						
				This listing was made by USEPA.						
				Atmospheric Deposition						
				Exotic Species		High	6560	Acres	1998	2003
				Disrupt natural benthos; change pollutant availability in food chain; disrupt food availability to native species.						
				Ballast Water						
				Furan compounds*		High	6560	Acres		
				* The specific compounds are: 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDF, 1,2,3,7,8,9-HxCDF, 2,3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF, and OCDF.						
				This listing was made by USEPA.						
				Atmospheric Deposition						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Mercury		High	6560	Acres	1998	2003
				<i>Current data indicate fish consumption and wildlife consumption impacted uses. Major source is historic: gold mining sediments and local mercury mining; most significant ongoing source is erosion and drainage from abandoned mines; moderate to low level inputs from point sources.</i>						
				Atmospheric Deposition						
				Industrial Point Sources						
				Municipal Point Sources						
				Natural Sources						
				Nonpoint Source						
				Resource Extraction						
				Nickel		Low	6560	Acres	2006	2010
				<i>Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.</i>						
				Municipal Point Sources						
				Other						
				Urban Runoff/Storm Sewers						
				PCBs		Medium	6560	Acres	2003	2008
				<i>This listing covers non dioxin-like PCBs.</i>						
				<i>Interim health advisory for fish; uncertainty regarding water column concentration data.</i>						
				Unknown Nonpoint Source						
				PCBs (dioxin-like)*		High	6560	Acres		
				<i>* The specific dioxin-like PCBs are 3,4,4',5-TCB (81), 3,3',3,3'-TCB (77), 3,3',4,4',5-PeCB (126), 3,3',4,4',4,4'-HxCB (169), 2,3,3',4,4'-PeCB (105), 2,3,4,4',5-PeCB (114), 2,3',4,4',5-PeCB (118), 2',3,4,4',5-PeCB (123), 2,3,3',4,4',5-HxCB (156), 2,3,3',4,4',5-HxCB (157), 2,3',4,4',5,5'-HxCB (167), 2,3,3',4,4',5,5'-HpCB (189).</i>						
				<i>This listing was made by USEPA.</i>						
				Unknown Nonpoint Source						
				Selenium		Low	6560	Acres	2006	2010
				<i>Affected use is one branch of the food chain; most sensitive indicator is hatchability in nesting diving birds, significant contributions from oil refineries (control program in place) and agriculture (carried downstream by rivers); exotic species may have made food chain more susceptible to accumulation of selenium; health consumption advisory in effect for scaup and scoter (diving ducks); low TMDL priority because Individual Control Strategy in place.</i>						
				Agriculture						
				Industrial Point Sources						
2	B	RICHARDSON BAY	203.130	Chlordane		Low	2560	Acres		
				<i>This listing was made by USEPA.</i>						
				Nonpoint Source						
				DDT		Low	2560	Acres		
				<i>This listing was made by USEPA.</i>						
				Nonpoint Source						
				Dieldrin		Low	2560	Acres		
				<i>This listing was made by USEPA.</i>						
				Nonpoint Source						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Dioxin compounds*		High	2560	Acres		
				* The specific compounds are: 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 1,2,3,4,7,8-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,4,6,7,8-HpCDD, and OCDD.						
				This listing was made by USEPA.						
					Atmospheric Deposition					
				Exotic Species		High	2560	Acres	1998	2003
				Disrupt natural benthos; change pollutant availability in food chain; endanger food availability to native species.						
					Ballast Water					
				Furan compounds*		High	2560	Acres		
				* The specific compounds are: 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDF, 1,2,3,7,8,9-HxCDF, 2,3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF, and OCDF.						
				This listing was made by USEPA.						
					Atmospheric Deposition					
				High Coliform Count		Medium	200	Acres	2003	2008
				Affected area, Waldo Point Harbor, is less than 10% of embayment; source has been positively identified as substandard sewage systems in some houseboat areas; extensive local control program in place with significant water quality improvements.						
					Boat Discharges/Vessel Wastes					
					Septage Disposal					
					Urban Runoff/Storm Sewers					
				Mercury		High	2560	Acres	1998	2003
				Current data indicate fish consumption and wildlife consumption impacted uses: health consumption advisory in effect for multiple fish species including striped bass and shark. Major source is historic: gold mining sediments and local mercury mining; most significant ongoing source is erosion and drainage from abandoned mines; moderate to low level inputs from point sources.						
					Atmospheric Deposition					
					Municipal Point Sources					
					Natural Sources					
					Nonpoint Source					
					Resource Extraction					
				PCBs		Medium	2560	Acres	2003	2008
				This listing covers non dioxin-like PCBs.						
				Interim health advisory for fish; uncertainty regarding water column concentration data.						
					Unknown Nonpoint Source					
				PCBs (dioxin-like)*		High	2560	Acres		
				* The specific dioxin-like PCBs are 3,4,4',5'-TCB (81), 3,3',3,3'-TCB (77), 3,3',4,4',5'-PeCB (126), 3,3',4,4',4,4'-HxCB (169), 2,3,3',4,4'-PeCB (105), 2,3,4,4',5'-PeCB (114), 2,3',4,4',5'-PeCB (118), 2',3,4,4',5'-PeCB (123), 2,3,3',4,4',5'-HxCB (156), 2,3,3',4,4',5'-HxCB (157), 2,3',4,4',5,5'-HxCB (167), 2,3,3',4,4',5,5'-HpCB (189).						
				This listing was made by USEPA.						
					Unknown Nonpoint Source					

2 B SAN FRANCISCO BAY, CENTRAL 203.120

Chlordane

This listing was made by USEPA.

Low

67700

Acres

Nonpoint Source

Appendix -14

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Copper		Medium	67700	Acres	2003	2008
				Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.						
				Atmospheric Deposition						
				Municipal Point Sources						
				Other						
				Urban Runoff/Storm Sewers						
				DDT		Low	67700	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Diazinon		Medium	67700	Acres	2000	2005
				Diazinon levels cause water column toxicity. Two patterns: pulses through riverine systems linked to agricultural application in late winter and pulse from residential land use areas linked to homeowner pesticide use in late spring, early summer. Chlorpyrifos may also be the cause of toxicity; more data needed, however.						
				Nonpoint Source						
				Dieldrin		Low	67700	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Dioxin compounds*		High	67700	Acres		
				* The specific compounds are: 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 1,2,3,4,7,8-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,4,6,7,8-HpCDD, and OCDD.						
				This listing was made by USEPA.						
				Atmospheric Deposition						
				Exotic Species		High	67700	Acres	1998	2003
				Disrupt natural benthos; change pollutant availability in food chain; endanger food availability to native species.						
				Ballast Water						
				Furan compounds*		High	67700	Acres		
				* The specific compounds are: 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDF, 1,2,3,7,8,9-HxCDF, 2,3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF, and OCDF.						
				This listing was made by USEPA.						
				Atmospheric Deposition						
				Mercury		High	67700	Acres	1998	2003
				Current data indicate fish consumption and wildlife consumption impacted uses: health consumption advisory in effect for multiple fish species including striped bass and shark. Major source is historic: gold mining sediments and local mercury mining; most significant ongoing source is erosion and drainage from abandoned mines; moderate to low level inputs from point sources.						
				Atmospheric Deposition						
				Industrial Point Sources						
				Municipal Point Sources						
				Natural Sources						
				Nonpoint Source						
				Resource Extraction						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				PCBs		Medium	67700	Acres	2003	2008
				<i>This listing covers non dioxin-like PCBs. Interim health advisory for fish; uncertainty regarding water column concentration data.</i> Unknown Nonpoint Source						
				PCBs (dioxin-like)*		High	67700	Acres		
				<i>* The specific dioxin-like PCBs are 3,4,4',5-TCB (81), 3,3',3,3'-TCB (77), 3,3',4,4',5-PeCB (126), 3,3',4,4',4'-HxCB (169), 2,3,3',4,4'-PeCB (105), 2,3,4,4',5-PeCB (114), 2,3',4,4',5-PeCB (118), 2',3,4,4',5-PeCB (123), 2,3,3',4,4',5-HxCB (156), 2,3,3',4,4',5'-HxCB (157), 2,3',4,4',5,5'-HxCB (167), 2,3,3',4,4',5,5'-HpCB (189)</i> <i>This listing was made by USEPA.</i> Unknown Nonpoint Source						
				Selenium		Low	67700	Acres	2006	2010
				<i>Affected use is one branch of the food chain; most sensitive indicator is hatchability in nesting diving birds, significant contributions from oil refineries (control program in place) and agriculture (carried downstream by rivers); exotic species may have made food chain more susceptible to accumulation of selenium; health consumption advisory in effect for scaup and scoter (diving ducks); low TMDL priority because Individual Control Strategy in place.</i> Agriculture Exotic Species Industrial Point Sources Natural Sources						
2	B	SAN FRANCISCO BAY, LOWER	204.100	Chlordane		Low	79900	Acres		
				<i>This listing was made by USEPA.</i> Nonpoint Source						
				Copper		Medium	79900	Acres	2003	2008
				<i>Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.</i> Atmospheric Deposition Municipal Point Sources Other Urban Runoff/Storm Sewers						
				DDT		Low	79900	Acres		
				<i>This listing was made by USEPA.</i> Nonpoint Source						
				Diazinon		Medium	79900	Acres	2000	2005
				<i>Diazinon levels cause water column toxicity. Two patterns: pulses through riverine systems linked to agricultural application in late winter and pulse from residential land use areas linked to homeowner pesticide use in late spring, early summer. Chlorpyrifos may also be the cause of toxicity; more data needed, however.</i> Nonpoint Source						
				Dieldrin		Low	79900	Acres		
				<i>This listing was made by USEPA.</i> Nonpoint Source						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Dioxin compounds*		High	79900	Acres		
				* The specific compounds are: 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 1,2,3,4,7,8-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,4,6,7,8-HpCDD, and OCDD.						
				This listing was made by USEPA.						
				Atmospheric Deposition						
				Exotic Species		High	79900	Acres	1998	2003
				Disrupt natural benthos; change pollutant availability in food chain; endanger food availability to native species.						
				Ballast Water						
				Furan compounds*		High	79900	Acres		
				* The specific compounds are: 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDF, 1,2,3,7,8,9-HxCDF, 2,3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF, and OCDF.						
				This listing was made by USEPA.						
				Atmospheric Deposition						
				Mercury		High	79900	Acres	1998	2003
				Current data indicate fish consumption and wildlife consumption impacted uses: health consumption advisory in effect for multiple fish species including striped bass and shark. Major source is historic: gold mining sediments and local mercury mining; most significant ongoing source is erosion and drainage from abandoned mines; moderate to low level inputs from point sources; water objective exceedances. Elevated sediment levels, elevated tissue levels.						
				Atmospheric Deposition						
				Industrial Point Sources						
				Municipal Point Sources						
				Natural Sources						
				Nonpoint Source						
				Resource Extraction						
				Nickel		Medium	79900	Acres	2003	2008
				Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels of nickel.						
				Atmospheric Deposition						
				Municipal Point Sources						
				Other						
				Urban Runoff/Storm Sewers						
				PCBs		Medium	79900	Acres	2003	2008
				This listing covers non dioxin-like PCBs.						
				Interim health advisory for fish: uncertainty regarding water column concentration data.						
				Unknown Nonpoint Source						
				PCBs (dioxin-like)*		High	79900	Acres		
				* The specific dioxin-like PCBs are 3,4,4',5-TCB (81), 3,3',3,3'-TCB (77), 3,3',4,4',5-PeCB (126), 3,3',4,4',4,4'-HxCB (169), 2,3,3',4,4'-PeCB (105), 2,3,4,4',5-PeCB (114), 2,3',4,4',5-PeCB (118), 2',3,4,4',5-PeCB (123), 2,3,3',4,4',5-HxCB (156), 2,3,3',4,4',5-HxCB (157), 2,3',4,4',5,5'-HxCB (167), 2,3,3',4,4',5,5'-HpCB (189).						
				This listing was made by USEPA.						
				Unknown Nonpoint Source						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
2	B	SAN FRANCISCO BAY, SOUTH	205.100	Chlordane		Low	24500	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Copper		High	24500	Acres	1998	2003
				Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.						
				Atmospheric Deposition						
				Municipal Point Sources						
				Other						
				Urban Runoff/Storm Sewers						
				DDT		Low	24500	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Diazinon		Medium	24500	Acres	2000	2005
				Diazinon levels cause water column toxicity. Two patterns: pulses through riverine systems linked to agricultural application in late winter and pulse from residential land use areas linked to homeowner pesticide use in late spring, early summer. Chlorpyrifos may also be the cause of toxicity; more data needed, however.						
				Nonpoint Source						
				Dieldrin		Low	24500	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Dioxin compounds*		High	24500	Acres		
				* The specific compounds are: 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 1,2,3,4,7,8-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,4,6,7,8-HpCDD, and OCDD.						
				This listing was made by USEPA.						
				Atmospheric Deposition						
				Exotic Species		High	24500	Acres	1998	2003
				Disrupt natural benthos; change pollutant availability in food chain; endanger food availability to native species.						
				Ballast Water						
				Furan compounds*		High	24500	Acres		
				* The specific compounds are: 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDF, 1,2,3,7,8,9-HxCDF, 2,3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF, and OCDF.						
				This listing was made by USEPA.						
				Atmospheric Deposition						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Mercury		High	24500	Acres	1998	2003
				Current data indicate fish consumption and wildlife consumption impacted uses: health consumption advisory in effect for multiple fish species including striped bass and shark. Major source is historic: gold mining sediments and local mercury mining; most significant ongoing source is erosion and drainage from abandoned mines; moderate to low level inputs from point sources; water objective exceedances. Elevated sediment levels, elevated tissue levels.						
				Atmospheric Deposition						
				Industrial Point Sources						
				Municipal Point Sources						
				Natural Sources						
				Nonpoint Source						
				Resource Extraction						
				Nickel		High	24500	Acres	1998	2003
				Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.						
				Municipal Point Sources						
				Other						
				Urban Runoff/Storm Sewers						
				PCBs		Medium	24500	Acres	2003	2008
				This listing covers non dioxin-like PCBs.						
				Interim health advisory for fish; uncertainty regarding water column concentration data.						
				Unknown Nonpoint Source						
				PCBs (dioxin-like)*		High	24500	Acres		
				* The specific dioxin-like PCBs are 3,4,4',5-TCB (81), 3,3',3,3'-TCB (77), 3,3',4,4',5-PeCB (126), 3,3',4,4',4,4'-HxCB (169), 2,3,3',4,4'-PeCB (105), 2,3,4,4',5-PeCB (114), 2,3',4,4',5-PeCB (118), 2',3,4,4',5-PeCB (123), 2,3,3',4,4',5-HxCB (156), 2,3,3',4,4',5'-HxCB (157), 2,3',4,4',5,5'-HxCB (167), 2,3,3',4,4',5,5'-HpCB (189).						
				This listing was made by USEPA.						
				Unknown Nonpoint Source						
				Selenium		Low	24500	Acres	2006	2010
				A formal health advisory has been issued by OEHHA for benthic-feeding ducks in South San Francisco Bay. This health advisory clearly establishes that water contact recreation beneficial use (REC-1) is not fully supported and standards are not fully met.						
				Agriculture						
				Domestic Use of Ground Water						
2	B	SAN PABLO BAY	206.100	Chlordane		Low	71300	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Copper		Medium	71300	Acres	2003	2008
				Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.						
				Atmospheric Deposition						
				Municipal Point Sources						
				Other						
				Urban Runoff/Storm Sewers						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				DDT		Low	71300	Acres		
				<i>This listing was made by USEPA.</i>						
					Nonpoint Source					
				Diazinon		Medium	71300	Acres	2000	2005
				<i>Diazinon levels cause water column toxicity. Two patterns: pulses through riverine systems linked to agricultural application in late winter and pulse from residential land use areas linked to homeowner pesticide use in late spring, early summer. Chlorpyrifos may also be the cause of toxicity; more data needed, however.</i>						
					Nonpoint Source					
				Dieldrin		Low	71300	Acres		
				<i>This listing was made by USEPA.</i>						
					Nonpoint Source					
				Dioxin compounds*		High	71300	Acres		
				<i>* The specific compounds are: 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 1,2,3,4,7,8-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,4,6,7,8-HpCDD, and OCDD.</i>						
				<i>This listing was made by USEPA.</i>						
					Atmospheric Deposition					
				Exotic Species		High	71300	Acres	1998	2003
				<i>Disrupt natural benthos; change pollutant availability in food chain; disrupt food availability to native species.</i>						
					Ballast Water					
				Furan compounds*		High	71300	Acres		
				<i>* The specific compounds are: 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDF, 1,2,3,7,8,9-HxCDF, 2',3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF, and OCDF.</i>						
				<i>This listing was made by USEPA.</i>						
					Atmospheric Deposition					
				Mercury		High	71300	Acres	1998	2003
				<i>Current data indicate fish consumption and wildlife consumption impacted uses: health consumption advisory in effect for multiple fish species including striped bass and shark. Major source is historic: gold mining sediments and local mercury mining; most significant ongoing source is erosion and drainage from abandoned mines; moderate to low level inputs from point sources.</i>						
					Atmospheric Deposition					
					Municipal Point Sources					
					Natural Sources					
					Nonpoint Source					
					Resource Extraction					
				Nickel		Low	71300	Acres	2006	2010
				<i>Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.</i>						
					Municipal Point Sources					
					Other					
					Urban Runoff/Storm Sewers					
				PCBs		Medium	71300	Acres	2003	2008
				<i>This listing covers non dioxin-like PCBs.</i>						
				<i>Interim health advisory for fish; uncertainty regarding water column concentration data.</i>						
					Unknown Nonpoint Source					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
2	B	SUISUN BAY	207.100	PCBs (dioxin-like)*		High	71300	Acres		
				* The specific dioxin-like PCBs are 3,4,4',5-TCB (81), 3,3',3,3'-TCB (77), 3,3',4,4',5-PeCB (126), 3,3',4,4',4',4'-HxCB (169), 2,3,3',4,4'-PeCB (105), 2,3,4,4',5-PeCB (114), 2,3',4,4',5-PeCB (118), 2',3,4,4',5-PeCB (123), 2,3,3',4,4',5-HxCB (156), 2,3,3',4,4',5-HxCB (157), 2,3',4,4',5,5'-HxCB (167), 2,3,3',4,4',5,5'-HpCB (189).						
				This listing was made by USEPA.						
				Unknown Nonpoint Source						
				Selenium		Low	71300	Acres	2006	2010
				Affected use is one branch of the food chain; most sensitive indicator is hatchability in nesting diving birds, significant contributions from oil refineries (control program in place) and agriculture (carried downstream by rivers); exotic species may have made food chain more susceptible to accumulation of selenium; health consumption advisory in effect for scaup and scoter (diving ducks); low TMDL priority because Individual Control Strategy in place.						
				Agriculture						
				Exotic Species						
				Industrial Point Sources						
				Natural Sources						
				Chlordane		Low	25000	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Copper		Medium	25000	Acres	2003	2008
				Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.						
				Atmospheric Deposition						
				Municipal Point Sources						
				Other						
				Urban Runoff/Storm Sewers						
				DDT		Low	25000	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Diazinon		Medium	25000	Acres	2000	2005
				Diazinon levels cause water column toxicity. Two patterns: pulses through riverine systems linked to agricultural application in late winter and pulse from residential land use areas linked to homeowner pesticide use in late spring, early summer. Chlorpyrifos may also be the cause of toxicity; more data needed, however.						
				Nonpoint Source						
				Dieldrin		Low	25000	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Dioxin compounds*		High	25000	Acres		
				* The specific compounds are: 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 1,2,3,4,7,8-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,4,6,7,8-HpCDD, and OCDD.						
				This listing was made by USEPA.						
				Atmospheric Deposition						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Exotic Species		High	25000	Acres	1998	2003
				<i>Disrupt natural benthos; change pollutant availability in food chain; disrupt food availability to native species.</i>						
					Ballast Water					
				Furan compounds*		High	25000	Acres		
				* The specific compounds are: 2,3,7,8-TCDF, 1,2,3,7,8-PcCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDF, 1,2,3,7,8,9-HxCDF, 2',3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF, and OCDF.						
				<i>This listing was made by USEPA.</i>						
					Atmospheric Deposition					
				Mercury		High	25000	Acres	1998	2003
				<i>Current data indicate fish consumption and wildlife consumption impacted uses. Major source is historic: gold mining sediments and local mercury mining; most significant ongoing source is erosion and drainage from abandoned mines; moderate to low level inputs from point sources.</i>						
					Atmospheric Deposition					
					Industrial Point Sources					
					Natural Sources					
					Nonpoint Source					
					Resource Extraction					
				Nickel		Low	25000	Acres	2006	2010
				<i>Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.</i>						
					Municipal Point Sources					
					Other					
					Urban Runoff/Storm Sewers					
				PCBs		Medium	25000	Acres	2003	2008
				<i>This listing covers non dioxin-like PCBs.</i>						
				<i>Interim health advisory for fish; uncertainty regarding water column concentration data.</i>						
					Unknown Nonpoint Source					
				PCBs (dioxin-like)*		High	25000	Acres		
				* The specific dioxin-like PCBs are 3,4,4',5'-TCB (81), 3,3',3,3'-TCB (77), 3,3',4,4',5'-PeCB (126), 3,3',4,4',4,4'-HxCB (169), 2,3,3',4,4'-PeCB (105), 2,3,4,4',5'-PeCB (114), 2,3',4,4',5'-PeCB (118), 2',3,4,4',5'-PeCB (123), 2,3,3',4,4',5'-HxCB (156), 2,3,3',4,4',5'-HxCB (157), 2,3',4,4',5,5'-HxCB (167), 2,3,3',4,4',5,5'-HpCB (189).						
				<i>This listing was made by USEPA.</i>						
					Unknown Nonpoint Source					
				Selenium		Low	25000	Acres	2006	2010
				<i>Affected use is one branch of the food chain; most sensitive indicator is hatchability in nesting diving birds, significant contributions from oil refineries (control program in place) and agriculture (carried downstream by rivers); exotic species may have made food chain more susceptible to accumulation of selenium; health consumption advisory in effect for scaup and scoter (diving ducks); low TMDL priority because Individual Control Strategy in place.</i>						
					Exotic Species					
					Industrial Point Sources					
					Natural Sources					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
2	B	TOMALES BAY	201.110	Metals		Medium	7820	Acres	2002	2007
				TMDL will be developed as part of evolving watershed management effort. Tributary streams, Lagunitas Creek and Walker Creek, must be managed first. Additional monitoring and assessment needed.						
				Mine Tailings						
				Nutrients		Medium	7820	Acres	2002	2007
				TMDL will be developed as part of evolving watershed management effort. Tributary streams, Lagunitas Creek and Walker Creek, must be managed first. Additional monitoring and assessment needed.						
				Agriculture						
				Pathogens		Medium	7820	Acres	2002	2007
				TMDL will be developed as part of evolving watershed management effort. Tributary streams, Lagunitas Creek and Walker Creek, must be managed first. Additional monitoring and assessment needed.						
				Animal Operations						
				Septage Disposal						
				Sedimentation/Siltation		Medium	7820	Acres	2002	2007
				TMDL will be developed as part of evolving watershed management effort. Tributary streams, Lagunitas Creek and Walker Creek, must be managed first. Additional monitoring and assessment needed.						
				Agriculture						
				Upstream Impoundment						
2	E	SACRAMENTO SAN JOAQUIN DELTA	207.100	Chlordane		Low	15000	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Copper		Medium	15000	Acres	2003	2008
				Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.						
				Atmospheric Deposition						
				Municipal Point Sources						
				Other						
				Urban Runoff/Storm Sewers						
				DDT		Low	15000	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Diazinon		Medium	15000	Acres	2000	2005
				Diazinon levels cause water column toxicity. Two patterns: pulses through riverine systems linked to agricultural application in late winter and pulse from residential land use areas linked to homeowner pesticide use in late spring, early summer. Chlorpyrifos may also be the cause of toxicity; more data needed, however.						
				Nonpoint Source						
				Dieldrin		Low	15000	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Dioxin compounds*		High	15000	Acres		
				* The specific compounds are: 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 1,2,3,4,7,8-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,4,6,7,8-HpCDD, and OCDD.						
				This listing was made by USEPA.						
				Atmospheric Deposition						
				Exotic Species		High	15000	Acres	1998	2003
				Disrupt natural benthos; change pollutant availability in food chain; endanger food availability to native species.						
				Ballast Water						
				Furan compounds*		High	15000	Acres		
				* The specific compounds are: 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDF, 1,2,3,7,8,9-HxCDF, 2',3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF, and OCDF.						
				This listing was made by USEPA.						
				Atmospheric Deposition						
				Mercury		High	15000	Acres	1998	2003
				Current data indicate fish consumption and wildlife consumption impacted uses. Major source is historic: gold mining sediments and local mercury mining; most significant ongoing source is erosion and drainage from abandoned mines; moderate to low level inputs from point sources.						
				Atmospheric Deposition						
				Industrial Point Sources						
				Municipal Point Sources						
				Nonpoint Source						
				Resource Extraction						
				Nickel		Low	15000	Acres	2006	2010
				Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.						
				Municipal Point Sources						
				Other						
				Urban Runoff/Storm Sewers						
				PCBs		Medium	15000	Acres	2003	2008
				This listing covers non dioxin-like PCBs.						
				Interim health advisory for fish; uncertainty regarding water column concentration data.						
				Unknown Nonpoint Source						
				PCBs (dioxin-like)*		High	15000	Acres		
				* The specific dioxin-like PCBs are 3,4,4',5'-TCB (81), 3,3',3,3'-TCB (77), 3,3',4,4',5'-PeCB (126), 3,3',4,4',4,4'-HxCB (169), 2,3,3',4,4'-PeCB (105), 2,3,4,4',5'-PeCB (114), 2,3',4,4',5'-PeCB (118), 2',3,4,4',5'-PeCB (123), 2,3,3',4,4',5'-HxCB (156), 2,3,3',4,4',5'-HxCB (157), 2,3',4,4',5,5'-HxCB (167), 2,3,3',4,4',5,5'-HpCB (189).						
				This listing was made by USEPA.						
				Unknown Nonpoint Source						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Selenium		Low	15000	Acres	2006	2010
				Affected use is one branch of the food chain; most sensitive indicator is hatchability in nesting diving birds, significant contributions from oil refineries (control program in place) and agriculture (carried downstream by rivers); exotic species may have made food chain more susceptible to accumulation of selenium; health consumption advisory in effect for scaup and scoter (diving ducks); low TMDL priority because Individual Control Strategy in place.						
				Agriculture Exotic Species Industrial Point Sources Natural Sources						
2	L	CALERO RESERVOIR	205.400	Mercury		High	350	Acres	1998	2003
				TMDL will be developed as part of the Santa Clara Basin Watershed Management Initiative. Additional monitoring and assessment is needed.						
				Mine Tailings Surface Mining						
2	L	GUADALUPE RESERVOIR	205.400	Mercury		High	80	Acres	1998	2003
				TMDL will be developed as part of the Santa Clara Basin Watershed Management Initiative. Additional monitoring and assessment is needed.						
				Mine Tailings Surface Mining						
2	L	LAKE HERMAN	207.210	Mercury		Low	110	Acres	2005	2010
				Additional monitoring and assessment needed. Problem due to historical mining.						
				Surface Mining						
2	L	MERRITT LAKE	204.200	Floating Material		Low	160	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Org. enrichment/Low D.O.		Low	160	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
2	R	ALAMEDA CREEK	204.300	Diazinon		Low	50.77	Miles		
				This listing was made by USEPA.						
				Urban Runoff/Storm Sewers						
2	R	ALAMITOS CREEK	205.400	Mercury		High	21	Miles	1998	2003
				TMDL will be developed as part of the Santa Clara Basin Watershed Management Initiative. Additional monitoring and assessment is needed.						
				Mine Tailings						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
2	R	ARROYO CORTE MADERA DEL PRESIDIO	203.200	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	3.2	Miles		
2	R	ARROYO DE LA LAGUNA	204.300	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	7.4	Miles		
2	R	ARROYO DEL VALLE	204.300	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	48.7	Miles		
2	R	ARROYO HONDO	204.300	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	9.23	Miles		
2	R	BUTANO CREEK	202.400	Sedimentation/Siltation <i>Impairment to steelhead habitat.</i>	Nonpoint Source	Medium	1	Miles	2000	2005
2	R	CALABAZAS CREEK	206.401	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	4.7	Miles		
2	R	CORTE MADERA CREEK	203.200	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	4.12	Miles		
2	R	COYOTE CREEK (MARIN CO)	203.200	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	2.62	Miles		
2	R	COYOTE CREEK (SANTA CLARA CO.)	205.300	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	68.63	Miles		
2	R	GALLINAS CREEK	206.200	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	2.4	Miles		

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
2	R	GUADALUPE CREEK	205.400	Mercury		High	6	Miles	1998	2003
				TMDL will be developed as part of the Santa Clara Basin Watershed Management Initiative. Additional monitoring and assessment is needed.						
				Mine Tailings						
2	R	GUADALUPE RIVER	205.400	Diazinon		Low	18.21	Miles		
				This listing was made by USEPA.						
				Urban Runoff/Storm Sewers						
				Mercury		High	30	Miles	1998	2003
				TMDL will be developed as part of the Santa Clara Basin Watershed Management Initiative. Additional monitoring and assessment is needed.						
				Mine Tailings						
2	R	LAGUNITAS CREEK	201.130	Nutrients		Medium	22	Miles	2002	2007
				Tributary to Tomales Bay. TMDLs will be developed as part of evolving watershed management effort. Additional monitoring and assessment needed.						
				Agriculture						
				Urban Runoff/Storm Sewers						
				Pathogens		Medium	22	Miles	2002	2007
				Tributary to Tomales Bay. TMDLs will be developed as part of evolving watershed management effort. Additional monitoring and assessment needed.						
				Agriculture						
				Urban Runoff/Storm Sewers						
				Sedimentation/Siltation		Medium	22	Miles	2002	2007
				Tributary to Tomales Bay. TMDLs will be developed as part of evolving watershed management effort. Additional monitoring and assessment needed.						
				Agriculture						
				Urban Runoff/Storm Sewers						
2	R	LAUREL CREEK	207.230	Diazinon		Low	3.02	Miles		
				This listing was made by USEPA.						
				Urban Runoff/Storm Sewers						
2	R	LEDGEWOOD CREEK	207.230	Diazinon		Low	12.44	Miles		
				This listing was made by USEPA.						
				Urban Runoff/Storm Sewers						
2	R	LOS GATOS CREEK (REG 2)	205.400	Diazinon		Low	25.72	Miles		
				This listing was made by USEPA.						
				Urban Runoff/Storm Sewers						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
2	R	MATADERO CREEK	205.500	Diazinon <i>This listing was made by USEPA.</i>		Low	7.34	Miles		
					Urban Runoff/Storm Sewers					
2	R	MILLER CREEK	206.200	Diazinon <i>This listing was made by USEPA.</i>		Low	9.03	Miles		
					Urban Runoff/Storm Sewers					
2	R	MT. DIABLO CREEK	207.310	Diazinon <i>This listing was made by USEPA.</i>		Low	12.63	Miles		
					Urban Runoff/Storm Sewers					
2	R	NAPA RIVER	206.500	Nutrients <i>TMDL will be developed as part of ongoing watershed management effort. Additional monitoring and assessment needed.</i>	Agriculture	Medium	55	Miles	2000	2005
				Pathogens <i>TMDL will be developed as part of ongoing watershed management effort. Additional monitoring and assessment needed.</i>	Agriculture Urban Runoff/Storm Sewers	Medium	55	Miles	2000	2005
				Sedimentation/Siltation <i>TMDL will be developed as part of ongoing watershed management effort. Additional monitoring and assessment needed.</i>	Agriculture Construction/Land Development Urban Runoff/Storm Sewers	High	55	Miles	1998	2003
2	R	NOVATO CREEK	206.200	Diazinon <i>This listing was made by USEPA.</i>		Low	18.74	Miles		
					Urban Runoff/Storm Sewers					
2	R	PERMANENTE CREEK	205.500	Diazinon <i>This listing was made by USEPA.</i>		Low	13.1	Miles		
					Urban Runoff/Storm Sewers					
2	R	PESCADERO CREEK (REG 2)	202.400	Sedimentation/Siltation <i>Impairment to steelhead habitat.</i>		Medium	21	Miles	2000	2005
					Nonpoint Source					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
2	R	PETALUMA RIVER	206.300	Nutrients TMDL will be developed as part of ongoing watershed management effort. Additional monitoring and assessment needed.	Agriculture Construction/Land Development Urban Runoff/Storm Sewers	Medium	25	Miles	2000	2005
				Pathogens TMDL will be developed as part of ongoing watershed management effort. Additional monitoring and assessment needed.	Agriculture Construction/Land Development Urban Runoff/Storm Sewers	Medium	25	Miles	2000	2005
				Sedimentation/Siltation TMDL will be developed as part of ongoing watershed management effort. Additional monitoring and assessment needed.	Agriculture Construction/Land Development Urban Runoff/Storm Sewers	Medium	25	Miles	2000	2005
2	R	PINE CREEK	207.310	Diazinon This listing was made by USEPA.	Urban Runoff/Storm Sewers	Low	12.56	Miles		
2	R	PINOLE CREEK	206.600	Diazinon This listing was made by USEPA.	Urban Runoff/Storm Sewers	Low	9.17	Miles		
2	R	RODEO CREEK	201.300	Diazinon This listing was made by USEPA.	Urban Runoff/Storm Sewers	Low	7.96	Miles		
2	R	SAN ANTONIO CREEK (REG 2)	206.300	Diazinon This listing was made by USEPA.	Urban Runoff/Storm Sewers	Low	17.77	Miles		
2	R	SAN FELIPE CREEK	205.300	Diazinon This listing was made by USEPA.	Urban Runoff/Storm Sewers	Low	15.47	Miles		
2	R	SAN FRANCISQUITO CREEK	205.500	Diazinon This listing was made by USEPA.	Urban Runoff/Storm Sewers	Low	12.05	Miles		

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

Appendix -29

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Sedimentation/Siltation Impairment to steelhead habitat.		Medium	18	Miles	2000	2005
				Nonpoint Source						
2	R	SAN GREGORIO CREEK	202.300	Sedimentation/Siltation Impairment to steelhead habitat.		Medium	16	Miles	2000	2005
				Nonpoint Source						
2	R	SAN LEANDRO CREEK	204.200	Diazinon This listing was made by USEPA.		Low	14.77	Miles		
				Urban Runoff/Storm Sewers						
2	R	SAN LORENZO CREEK (R2)	204.200	Diazinon This listing was made by USEPA.		Low	11.7	Miles		
				Urban Runoff/Storm Sewers						
2	R	SAN MATEO CREEK	204.400	Diazinon This listing was made by USEPA.		Low	11.05	Miles		
				Urban Runoff/Storm Sewers						
2	R	SAN PABLO CREEK	206.600	Diazinon This listing was made by USEPA.		Low	16.14	Miles		
				Urban Runoff/Storm Sewers						
2	R	SAN RAFAEL CREEK	203.200	Diazinon This listing was made by USEPA.		Low	2.8	Miles		
				Urban Runoff/Storm Sewers						
2	R	SARATOGA CREEK	205.500	Diazinon This listing was made by USEPA.		Low	17.86	Miles		
				Urban Runoff/Storm Sewers						
2	R	SONOMA CREEK	206.400	Nutrients TMDL will be developed as part of ongoing watershed management effort. Additional monitoring and assessment needed.		Medium	23	Miles	2000	2005
				Agriculture Construction/Land Development Urban Runoff/Storm Sewers						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Pathogens		Medium	23	Miles	2000	2005
				TMDL will be developed as part of ongoing watershed management effort. Additional monitoring and assessment needed.						
					Agriculture					
					Construction/Land Development					
					Urban Runoff/Storm Sewers					
				Sedimentation/Siltation		Medium	23	Miles	2000	2005
				TMDL will be developed as part of ongoing watershed management effort. Additional monitoring and assessment needed.						
					Agriculture					
					Construction/Land Development					
					Urban Runoff/Storm Sewers					
2	R	STEVENS CREEK	205.500	Diazinon		Low	22.26	Miles		
				This listing was made by USEPA.						
					Urban Runoff/Storm Sewers					
2	R	SUISUN SLOUGH	207.23	Diazinon		Low	10	Miles		
				This listing was made by USEPA.						
					Urban Runoff/Storm Sewers					
2	R	WALKER CREEK	201.120	Metals		Medium	25	Miles	2002	2007
				Tributary to Tomales Bay. TMDLs will be developed as part of evolving watershed management effort. Additional monitoring and assessment needed.						
					Mine Tailings					
					Surface Mining					
				Nutrients		Medium	25	Miles	2002	2007
				Tributary to Tomales Bay. TMDLs will be developed as part of evolving watershed management effort. Additional monitoring and assessment needed.						
					Agriculture					
				Sedimentation/Siltation		Medium	25	Miles	2002	2007
				Tributary to Tomales Bay. TMDLs will be developed as part of evolving watershed management effort. Additional monitoring and assessment needed.						
					Agriculture					
2	R	WALNUT CREEK	207.320	Diazinon		Low	9.03	Miles		
				This listing was made by USEPA.						
					Urban Runoff/Storm Sewers					
2	R	WILDCAT CREEK	206.600	Diazinon		Low	12.07	Miles		
				This listing was made by USEPA.						
					Urban Runoff/Storm Sewers					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
2	T	SUISUN MARSH WETLANDS	207.230	Metals <i>Additional monitoring and assessment needed.</i>	Agriculture Flow Regulation/Modification Urban Runoff/Storm Sewers	Medium	57000	Acres	2003	2008
				Nutrients <i>Additional monitoring and assessment needed.</i>	Agriculture Flow Regulation/Modification Urban Runoff/Storm Sewers	Medium	57000	Acres	2003	2008
				Org. enrichment/Low D.O. <i>Additional monitoring and assessment needed.</i>	Agriculture Flow Regulation/Modification Urban Runoff/Storm Sewers	Medium	57000	Acres	2003	2008
				Salinity <i>Additional monitoring and assessment needed.</i>	Agriculture Flow Regulation/Modification Urban Runoff/Storm Sewers	Medium	57000	Acres	2003	2008
3	B	MONTEREY HARBOR	309.500	Metals	Railroad Slag Pile	Medium	74	Acres	0198	0403
				Unknown Toxicity	Source Unknown	Low	74	Acres	0198	0411
3	B	MORRO BAY	310.220	Metals	Boat Discharges/Vessel Wastes Nonpoint Source Surface Mining	High	100	Acres	0696	0400
				Pathogens	Natural Sources Nonpoint Source Septage Disposal Upland Grazing Urban Runoff/Storm Sewers	High	50	Acres	0696	0400
				Sedimentation/Siltation	Agriculture Channel Erosion Channelization Construction/Land Development Irrigated Crop Production Resource Extraction	High	100	Acres	0696	0699

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
3	B	MOSS LANDING HARBOR	306.000	Pathogens	Agriculture Boat Discharges/Vessel Wastes Nonpoint Source	Low	40	Acres	0405	0409
				Pesticides	Agriculture Irrigated Crop Production Specialty Crop Production	Low	160	Acres	0405	0409
				Sedimentation/Siltation	Agriculture Agriculture-storm runoff Channel Erosion Dredging (Hydromod.) Erosion/Siltation Hydromodification Irrigated Crop Production Nonpoint Source	Low	160	Acres	0405	0409
3	C	MONTEREY BAY SOUTH	309.500	Metals	Surface Mining	Low	10	Miles	0198	0411
				Pesticides	Agriculture	Low	10	Miles	0198	0411
3	C	PACIFIC OCEAN AT POINT RINCON	315.340	Pathogens	Nonpoint Source Urban Runoff/Storm Sewers	Medium	5	Miles	0406	0411
3	E	CARPINTERIA MARSH (EL ESTERO MARSH)	315.340	Nutrients	Agriculture	Low	80	Acres	0406	0411
				Org. enrichment/Low D.O.	Agriculture	Low	80	Acres	0406	0411
				Priority Organics	Urban Runoff/Storm Sewers	Low	80	Acres	0406	0411
				Sedimentation/Siltation	Agriculture Construction/Land Development Storm sewers	Low	80	Acres	0406	0411

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
3	E	ELKHORN SLOUGH	306.000	Pathogens	Natural Sources Nonpoint Source	Low	500	Acres	0405	0409
				Pesticides	Industrial discharge from PG&E may transfer pollutants from Old Salinas river and Moss Landing Harbor to the slough.	Low	500	Acres	0405	0409
					Agricultural Return Flows Agriculture Agriculture-storm runoff Contaminated Sediments Erosion/Siltation Irrigated Crop Production Nonpoint Source					
				Sedimentation/Siltation		Low	50	Acres	0405	0409
					Agriculture Agriculture-storm runoff Channel Erosion Irrigated Crop Production Nonpoint Source					
3	E	GOLETA SLOUGH/ESTUARY	315.310	Metals	Industrial Point Sources	Low	200	Acres	0406	0411
				Pathogens	Urban Runoff/Storm Sewers	Low	200	Acres	0406	0411
				Priority Organics	Nonpoint Source	Low	200	Acres	0406	0411
				Sedimentation/Siltation	Construction/Land Development	Low	200	Acres	0406	0411
3	E	OLD SALINAS RIVER ESTUARY	309.100	Nutrients	Agricultural Return Flows Agriculture Irrigated Crop Production Nonpoint Source	Medium	50	Acres	0198	0403
				Pesticides	Agricultural Return Flows Agriculture Agriculture-irrigation tailwater Agriculture-storm runoff Irrigated Crop Production Nonpoint Source	Medium	50	Acres	0198	0403

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
3	E	SALINAS RIVER LAGOON (NORTH)	309.100	Nutrients	Nonpoint Source	Medium	75	Acre	0198	0403
				Pesticides		Medium	75	Acre	0198	0403
				Sedimentation/Siltation	Nonpoint Source	Medium	75	Acre	0198	0401
3	E	SAN LORENZO RIVER ESTUARY	304.120	Pathogens	Natural Sources Urban Runoff/Storm Sewers	Medium	20	Acre	0499	0401
				Sedimentation/Siltation		High	20	Acre	0198	0400
					Hydromodification					
3	E	WATSONVILLE SLOUGH	305.100	Metals	Agriculture Urban Runoff/Storm Sewers	Medium	300	Acre	0199	0403
				Oil and grease		Medium	300	Acre	0199	0403
				Pathogens	Nonpoint Source Urban Runoff/Storm Sewers	Medium	300	Acre	0199	0403
				Pesticides	Agricultural Return Flows Agriculture Agriculture-storm runoff Irrigated Crop Production Nonpoint Source	Medium	300	Acre	0199	0403
				Sedimentation/Siltation		Medium	300	Acre	0198	0401
3	L	HERNANDEZ RESERVOIR	305.500	Mercury	Subsurface Mining	Medium	619	Acre	0198	0403
3	L	NACIMIENTO RESERVOIR	309.820	Metals	Natural Sources Subsurface Mining	High	5370	Acre	0997	0400

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
3	R	APTOS CREEK	304.130	Pathogens	Urban Runoff/Storm Sewers	Low	4	Miles	0405	0411
				Sedimentation/Siltation	Channel Erosion Disturbed Sites (Land Develop.)	Medium	4	Miles	0101	0401
3	R	ARROYO BURRO CREEK	315.320	Pathogens	Nonpoint Source Urban Runoff/Storm Sewers	Medium	6	Miles	0406	0411
3	R	BLANCO DRAIN	309.100	Pesticides	Agricultural Return Flows Agriculture Agriculture-irrigation tailwater Agriculture-storm runoff Irrigated Crop Production Nonpoint Source	Medium	8	Miles	0198	0405
3	R	CARBONERA CREEK	304.120	Nutrients	Nonpoint Source	High	10	Miles	0493	0400
				Pathogens	Nonpoint Source Urban Runoff/Storm Sewers	Medium	10	Miles	0499	0401
				Sedimentation/Siltation	Construction/Land Development Nonpoint Source	High	10	Miles	0198	0400
3	R	CARPINTERIA CREEK	315.340	Pathogens	Agriculture Nonpoint Source Septage Disposal	Low	6	Miles	0406	0411
3	R	CHORRO CREEK	310.220	Metals	Mine Tailings Resource Extraction	High	11	Miles	0696	0400
				Nutrients	Agriculture Agriculture-storm runoff Irrigated Crop Production Municipal Point Sources	High	11	Miles	0696	0400

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Sedimentation/Siltation		High	11	Miles	0696	0699
					Agriculture					
					Agriculture-storm runoff					
					Channel Erosion					
					Channelization					
					Construction/Land Development					
					Erosion/Siltation					
					Golf course activities					
					Hydromodification					
					Irrigated Crop Production					
					Natural Sources					
					Nonpoint Source					
					Range Land					
					Resource Extraction					
					Road Construction					
					Streambank Modification/Destabilization					
					Upland Grazing					
3	R	CLEAR CREEK (R3)	304.120	Mercury		Medium	2	Miles	0198	0403
					Resource Extraction					
3	R	LAS TABLAS CREEK	309.810	Metals		High	13	Miles	0997	0400
					Surface Mining					
3	R	LAS TABLAS CREEK, NORTH FORK	309.810	Metals		High	5	Miles	0997	0400
					Surface Mining					
3	R	LAS TABLAS CREEK, SOUTH FORK	309.810	Metals		High	4	Miles	0997	0400
					Surface Mining					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
3	R	LLAGAS CREEK	305.300	Nutrients	Agricultural Return Flows Agriculture Agriculture-irrigation tailwater Agriculture-storm runoff Habitat Modification Irrigated Crop Production Municipal Point Sources Nonpoint Source Pasture Land Point Source Urban Runoff/Storm Sewers	High	22	Miles	0198	0401
				Sedimentation/Siltation	Agriculture Habitat Modification Hydromodification	Medium	22	Miles	0198	0401
3	R	LOMPICO CREEK	304.120	Nutrients	Septage Disposal	High	5	Miles	0493	0400
				Pathogens	Natural Sources Nonpoint Source Septage Disposal	Medium	5	Miles	0499	0401
				Sedimentation/Siltation	Construction/Land Development Natural Sources	High	5	Miles	0198	0400
3	R	LOS OSOS CREEK	310.220	Nutrients	Agricultural Return Flows Agriculture Agriculture-storm runoff Irrigated Crop Production	High	10	Miles	0696	0400
				Priority Organics	Urban Runoff/Storm Sewers	High	10	Miles	0696	0400

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Sedimentation/Siltation		High	10	Miles	0696	0699
					Agriculture					
					Agriculture-storm runoff					
					Channel Erosion					
					Channelization					
					Dredging (Hydromod.)					
					Erosion/Siltation					
					Habitat Modification					
					Hydromodification					
					Irrigated Crop Production					
					Natural Sources					
					Nonpoint Source					
					Range Land					
					Removal of Riparian Vegetation					
					Streambank Modification/Destabilization					
					Upland Grazing					
3	R	MISSION CREEK	315.320	Pathogens		Low	9	Miles	0406	0411
					Septage Disposal					
					Urban Runoff/Storm Sewers					
				Unknown Toxicity		Low	9	Miles	0406	0411
					Urban Runoff/Storm Sewers					
3	R	PAJARO RIVER	305.000	Nutrients		High	49	Miles	0198	0401
					Agricultural Return Flows					
					Agriculture					
					Agriculture-irrigation tailwater					
					Agriculture-storm runoff					
					Agriculture-subsurface drainage					
					Channelization					
					Irrigated Crop Production					
					Nonpoint Source					
					Removal of Riparian Vegetation					
					Urban Runoff/Storm Sewers					
					Wastewater - land disposal					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Sedimentation/Siltation		Medium	49	Miles	0198	0401
					Agriculture					
					Agriculture-storm runoff					
					Channel Erosion					
					Channelization					
					Habitat Modification					
					Hydromodification					
					Irrigated Crop Production					
					Range Land					
					Removal of Riparian Vegetation					
					Resource Extraction					
					Streambank Modification/Destabilization					
					Surface Mining					
3	R	RIDER GULCH CREEK	305.100	Sedimentation/Siltation		Medium	2	Miles	0198	0401
					Agriculture					
					Construction/Land Development					
					Silviculture					
3	R	SALINAS RECLAMATION CANAL	309.200	Pesticides		Medium	20	Miles	0198	0405
					Agricultural Return Flows					
					Agriculture					
					Agriculture-irrigation tailwater					
					Agriculture-storm runoff					
					Irrigated Crop Production					
					Minor Industrial Point Source					
					Nonpoint Source					
				Priority Organics		Medium	20	Miles	0198	0405
					Agricultural Return Flows					
					Agriculture					
					Agriculture-irrigation tailwater					
					Agriculture-storm runoff					
					Irrigated Crop Production					
					Minor Industrial Point Source					
					Nonpoint Source					
					Source Unknown					
					Urban Runoff/Storm Sewers					
3	R	SALINAS RIVER	309.100	Nutrients		Medium	50	Miles	0198	0403
					Agriculture					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE				
3	R	SAN ANTONIO CREEK (SANTA BARBARA COUNTY)	315.310	Pesticides	Agricultural Return Flows Agriculture Agriculture-irrigation tailwater Agriculture-storm runoff Irrigated Crop Production Nonpoint Source	Medium	50	Miles	0198	0403				
				Salinity/TDS/Chlorides	Agriculture	Medium	50	Miles	0198	0403				
				Sedimentation/Siltation	Agriculture Agriculture-storm runoff Channel Erosion Irrigated Crop Production Land Development Nonpoint Source Range Land Road Construction	Medium	90	Miles	0198	0401				
				Sedimentation/Siltation	Agriculture Nonpoint Source	Low	6	Miles	0406	0411				
				3	R	SAN BENITO RIVER	305.500	Sedimentation/Siltation	Agriculture Nonpoint Source Resource Extraction	Medium	86	Miles	0198	0401
								Nutrients	Nonpoint Source Septage Disposal	High	25	Miles	0493	0400
								Pathogens	Septage Disposal Urban Runoff/Storm Sewers	High	25	Miles	1999	2001
				3	R	SAN LORENZO RIVER	304.120	Sedimentation/Siltation	Construction/Land Development Land Development Silviculture Urban Runoff/Storm Sewers	High	25	Miles	1298	0400

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
3	R	SAN LUIS OBISPO CRK.(BELOW W.MARSH ST.)	310.240	Nutrients	Agriculture Agriculture-storm runoff Irrigated Crop Production Municipal Point Sources	High	9	Miles	0493	0400
				Pathogens	Urban Runoff/Storm Sewers	High	9	Miles	0493	0400
				Priority Organics	Industrial Point Sources	Medium	9	Miles	0498	0401
3	R	SANTA YNEZ RIVER	314.000	Nutrients	Nonpoint Source	Low	70	Miles	0403	0407
				Salinity/TDS/Chlorides	Agriculture	Low	70	Miles	0403	0407
				Sedimentation/Siltation	Agriculture Resource Extraction Urban Runoff/Storm Sewers	Low	70	Miles	0403	0407
3	R	SHINGLE MILL CREEK	304.120	Nutrients	Septage Disposal	High	2	Miles	0198	0401
				Sedimentation/Siltation	Construction/Land Development Nonpoint Source	High	2	Miles	0198	0401
3	R	VALENCIA CREEK	304.130	Pathogens	Agriculture Septage Disposal	Low	7	Miles	0406	0411
				Sedimentation/Siltation	Agriculture Construction/Land Development	Medium	7	Miles	0401	0405
3	R	WADDELL CREEK, EAST BRANCH	304.110	Nutrients	Municipal Point Sources	Medium	3	Miles	0401	0405
3	W	ESPINOSA SLOUGH	309.100	Nutrients	Agriculture Storm sewers	Medium	320	Acres	0198	0403
				Pesticides	Agriculture Urban Runoff/Storm Sewers	Medium	320	Acres	0198	0403

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

Appendix -42

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Priority Organics		Medium	320	Acres	0198	0403
					Nonpoint Source					
3	W	MORO COJO SLOUGH	309.100	Pesticides	Agricultural Return Flows Agriculture Agriculture-storm runoff Irrigated Crop Production Nonpoint Source	Low	345	Acres	0198	0411
				Sedimentation/Siltation	Agriculture Agriculture-storm runoff Construction/Land Development Irrigated Crop Production Nonpoint Source	Low	345	Acres	0198	0411
3	W	SALINAS RIVER REFUGE LAGOON (SOUTH)	309.100	Nutrients	Agriculture	Medium	163	Acres	0198	0401
				Pesticides	Agriculture	Medium	163	Acres	0198	0403
				Salinity/TDS/Chlorides	Agriculture	Medium	163	Acres	0198	0403
3	W	SCHWAN LAKE	304.120	Nutrients	Nonpoint Source	Low	32	Acres	0406	0411
				Pathogens	Natural Sources Urban Runoff/Storm Sewers	Low	32	Acres	0406	0411
3	W	SOQUEL LAGOON	304.130	Nutrients	Nonpoint Source Septage Disposal	Low	2	Acres	0403	0407
				Pathogens	Natural Sources Nonpoint Source Urban Runoff/Storm Sewers	Low	2	Acres	0403	0407
				Sedimentation/Siltation	Construction/Land Development	Medium	2	Acres	0401	0405

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
3	W	TEMLADERO SLOUGH	309.100	Nutrients	Agricultural Return Flows Agriculture Agriculture-storm runoff Irrigated Crop Production Nonpoint Source	Medium	150	Acres	0198	0403
				Pesticides	Agricultural Return Flows Agriculture Agriculture-storm runoff Irrigated Crop Production Nonpoint Source	Medium	150	Acres	0198	0403
4	B	CHANNEL ISLANDS HARBOR	403.11	Lead	Elevated levels of lead in sediment. Nonpoint Source	Low	220	Acres		
				Zinc	Elevated levels of zinc in sediment. Nonpoint Source	Low	220	Acres		
4	B	LA FISH HARBOR	405.12	DDT	Nonpoint/Point Source	High	50	Acres		
				PAHs	Nonpoint/Point Source	High	50	Acres		
				PCBs	Nonpoint/Point Source	High	50	Acres		
				Tributyltin	Nonpoint/Point Source	Low	0	Acres		
4	B	LA HARBOR CONSOLIDATED SLIP	405.12	Benthic Comm. Effects	Nonpoint Source	High	37.13	Acres		
				Chlordane	Elevated levels of chlordane in tissue and sediment. Nonpoint Source	Medium	37.13	Acres		
				Chromium	Elevated levels of chromium in sediment. Nonpoint Source	Medium	37.13	Acres		
				DDT	Elevated levels of DDT in tissue and sediment. Fish Consumption Advisory for DDT. Nonpoint Source	High	37.13	Acres		
				Lead	Elevated levels of lead in sediment. Nonpoint Source	Low	37.13	Acres		

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				PAHs		High	37.13	Acres		
				<i>Elevated levels of PAHs in sediment.</i>						
					Nonpoint Source					
				PCBs		High	37.13	Acres		
				<i>Elevated levels of PCBs in tissue and sediment. Fish Consumption Advisory for PCBs.</i>						
					Nonpoint Source					
				Sediment Toxicity		High	37.13	Acres		
					Nonpoint Source					
				Tributyltin		Low	37.13	Acres		
				<i>Elevated levels of tributyltin in tissue.</i>						
					Nonpoint Source					
				Zinc		Medium	37.13	Acres		
				<i>Elevated levels of zinc in tissue and sediment.</i>						
					Nonpoint Source					
4	B	LA HARBOR INNER BREAKWATER	405.12	DDT		High	1.5	Acres		
					Nonpoint/Point Source					
				PAHs		High	1.5	Acres		
					Nonpoint/Point Source					
				PCBs		High	1.5	Acres		
					Nonpoint/Point Source					
				Tributyltin		Low	1.5	Acres		
					Nonpoint/Point Source					
4	B	LA HARBOR MAIN CHANNEL	405.12	Beach Closures		Low	3785	Acres		
					Nonpoint/Point Source					
				Copper		Low	3785	Acres		
				<i>Elevated levels of copper in tissue and sediment.</i>						
					Nonpoint/Point Source					
				DDT		High	3785	Acres		
				<i>Elevated levels of DDT in tissue and sediment. Fish Consumption Advisory for DDT.</i>						
					Nonpoint/Point Source					
				PAHs		High	3785	Acres		
				<i>Elevated levels of PAHs in tissue and sediment.</i>						
					Nonpoint/Point Source					
				PCBs		High	3785	Acres		
				<i>Elevated levels of PCBs in tissue and sediment. Fish Consumption Advisory for PCBs.</i>						
					Nonpoint/Point Source					
				Sediment Toxicity		Low	3785	Acres		
					Nonpoint/Point Source					
				Tributyltin		Low	3785	Acres		
				<i>Elevated levels of tributyltin in sediment.</i>						
					Nonpoint/Point Source					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Zinc		Low	3785	Acres		
				<i>Elevated levels of zinc in tissue and sediment.</i>						
				Nonpoint/Point Source						
4	B	LA HARBOR SOUTHWEST SLIP	405.12	DDT		High	30	Acres		
				<i>Fish Consumption Advisory for DDT.</i>						
				Nonpoint Source						
				PCBs		High	30	Acres		
				<i>Fish Consumption Advisory for PCBs.</i>						
				Nonpoint Source						
				Sediment Toxicity		Medium	30	Acres		
				Nonpoint Source						
4	B	LONG BEACH HARBOR MAIN CHANNEL, SE,W BASIN, PIER J, BREAKWTR	405.12	Benthic Comm. Effects		Medium	3594	Acres		
				Nonpoint Source						
				DDT		High	3594	Acres		
				<i>Elevated levels of DDT in tissue. Fish Consumption Advisory for DDT.</i>						
				Nonpoint Source						
				PAHs		High	3594	Acres		
				<i>Elevated levels of PAHs in sediment.</i>						
				Nonpoint Source						
				PCBs		High	3594	Acres		
				<i>Elevated levels of PCBs in tissue. Fish Consumption Advisory for PCBs.</i>						
				Nonpoint Source						
				Sediment Toxicity		Medium	3594	Acres		
				Nonpoint Source						
4	B	MARINA DEL REY HARBOR-BACK BASINS	405.13	Benthic Comm. Effects		Low	413	Acres		
				Nonpoint Source						
				Chlordane		High	413	Acres		
				<i>Elevated levels of chlordane in tissue and sediment.</i>						
				Nonpoint Source						
				Copper		Medium	413	Acres		
				<i>Elevated levels of copper in tissue and sediment.</i>						
				Nonpoint Source						
				DDT		High	413	Acres		
				<i>Elevated levels of DDT in tissue and sediment. Shellfish Harvesting Advisory for DDT.</i>						
				Nonpoint Source						
				Dieldrin		Low	413	Acres		
				<i>Elevated levels of dieldrin in tissue.</i>						
				Nonpoint Source						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	B	PORT HUENEME HARBOR (BACK BASINS)	403.11	Fish Consumption Advisory	Nonpoint Source	High	413	Acres		
				High Coliform Count	Nonpoint Source	High	413	Acres		
				Lead	Nonpoint Source	Low	413	Acres		
				<i>Elevated levels of lead in tissue and sediment.</i>						
				PCBs	Nonpoint Source	High	413	Acres		
				<i>Elevated levels of PCBs in tissue. Shellfish Harvesting Advisory for PCBs.</i>						
				Sediment Toxicity	Nonpoint Source	Medium	413	Acres		
				Tributyltin	Nonpoint Source	Low	413	Acres		
				<i>Elevated levels of tributyltin in tissue.</i>						
				Zinc	Nonpoint Source	Medium	413	Acres		
				<i>Elevated levels of zinc in tissue and sediment.</i>						
				DDT	Nonpoint Source	High	50	Acres		
				<i>Elevated levels of DDT in tissue.</i>						
				PAHs	Nonpoint Source	High	59	Acres		
				<i>Elevated levels of PAHs in sediment.</i>						
4	B	SAN PEDRO BAY NEARS/OFF SHORE ZONES- CABRILLO PIER AREA	405.12	PCBs	Nonpoint Source	High	50	Acres		
				<i>Elevated levels of PCBs in tissue.</i>						
				Tributyltin	Nonpoint Source	Low	50	Acres		
				<i>Elevated levels of tributyltin in tissue.</i>						
				Zinc	Nonpoint Source	Low	50	Acres		
				<i>Elevated levels of zinc in tissue.</i>						
				Chromium	Nonpoint/Point Source	Low	10700	Acres		
				<i>Elevated levels of chromium in sediment.</i>						
				Copper	Nonpoint/Point Source	Low	10700	Acres		
				<i>Elevated levels of copper in sediment.</i>						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				DDT		High	10700	Acres		
				<i>Elevated levels of DDT in tissue and sediment. Fish Consumption Advisory for DDT.</i>						
				Nonpoint/Point Source						
				PAHs		High	10700	Acres		
				<i>Elevated levels of PAHs in sediment.</i>						
				Nonpoint/Point Source						
				PCBs		High	10700	Acres		
				<i>Fish Consumption Advisory for PCBs.</i>						
				Nonpoint/Point Source						
				Sediment Toxicity		Medium	10700	Acres		
				Nonpoint/Point Source						
				Zinc		Low	10700	Acres		
				<i>Elevated levels of zinc in sediment.</i>						
				Nonpoint/Point Source						
4	B	SANTA MONICA BAY OFFSHORE AND NEARSHORE	413.00	Cadmium		Low	16640	Acres		
				<i>Elevated levels of cadmium in sediment.</i>						
				Nonpoint/Point Source						
				Chlordane		Low	16640	Acres		
				<i>Elevated levels of chlordane in sediment.</i>						
				Nonpoint/Point Source						
				Copper		Low	16640	Acres		
				<i>Elevated levels of copper in sediment.</i>						
				Nonpoint/Point Source						
				DDT		High	16640	Acres		
				<i>Elevated levels of DDT in tissue and sediment.</i>						
				Nonpoint/Point Source						
				Debris		Low	16640	Acres		
				Nonpoint/Point Source						
				Fish Consumption Advisory		High	16640	Acres		
				Nonpoint/Point Source						
				Lead		Low	16640	Acres		
				<i>Elevated levels of lead in tissue and sediment.</i>						
				Nonpoint/Point Source						
				Mercury		Medium	16640	Acres		
				<i>Elevated levels of mercury in sediment.</i>						
				Nonpoint/Point Source						
				Nickel		Low	16640	Acres		
				<i>Elevated levels of nickel in sediment.</i>						
				Nonpoint/Point Source						
				PAHs		High	16640	Acres		
				<i>Elevated levels of PAHs in sediment.</i>						
				Nonpoint/Point Source						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				PCBs <i>Elevated levels of PCBs in tissue and sediment.</i>		High	16640	Acres		
					Nonpoint/Point Source					
				Sediment Toxicity		Medium	16640	Acres		
					Nonpoint/Point Source					
				Silver <i>Elevated levels of silver in tissue.</i>		Low	16640	Acres		
					Nonpoint/Point Source					
				Zinc <i>Elevated levels of zinc in sediment.</i>		Low	16640	Acres		
					Nonpoint/Point Source					
4	B	VENTURA HARBOR: VENTURA KEYES	403.11							
				High Coliform Count		High	40	Acres		
					Nonpoint Source					
4	C	ABALONE COVE BEACH	405.11							
				Beach Closures		Medium	0.94	Miles		
					Nonpoint Source					
				DDT <i>Elevated levels of DDT in sediment.</i>		High	0.94	Miles		
					Nonpoint Source					
				PCBs <i>Fish Consumption Advisory for PCBs.</i>		High	0.94	Miles		
					Nonpoint Source					
4	C	AMARILLO BEACH	404.21							
				DDT <i>Fish Consumption Advisory for DDT.</i>		High	0.3	Miles		
					Nonpoint Source					
				PCBs <i>Fish Consumption Advisory for PCBs.</i>		High	0.3	Miles		
					Nonpoint Source					
4	C	BIG ROCK BEACH	404.16							
				Beach Closures		Medium	1.09	Miles		
					Nonpoint Source					
				DDT <i>Fish Consumption Advisory for DDT.</i>		High	1.09	Miles		
					Nonpoint Source					
				High Coliform Count		High	1.09	Miles		
					Nonpoint Source					
				PCBs <i>Fish Consumption Advisory for PCBs.</i>		High	1.09	Miles		
					Nonpoint Source					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	C	BLUFF COVE BEACH	405.11	Beach Closures	Nonpoint Source	Medium	0.61	Miles		
				DDT	Fish Consumption Advisory for DDT.	High	0.61	Miles		
				PCBs	Fish Consumption Advisory for PCBs.	High	0.61	Miles		
					Nonpoint Source					
4	C	CABRILLO BEACH (INNER) LA HARBOR AREA	405.12	Beach Closures (Coliform)	Nonpoint Source	Low	0.79	Miles		
				DDT	Fish Consumption Advisory for DDT.	High	0.79	Miles		
				PCBs	Fish Consumption Advisory for PCBs.	High	0.79	Miles		
					Nonpoint Source					
4	C	CABRILLO BEACH OUTER	405.12	Beach Closures	Nonpoint Source	Medium	0.51	Miles		
				DDT	Fish Consumption Advisory for DDT.	High	0.51	Miles		
				High Coliform Count	Nonpoint Source	High	0.51	Miles		
				PCBs	Fish Consumption Advisory for PCBs.	High	0.51	Miles		
					Nonpoint Source					
4	C	CARBON BEACH	404.16	Beach Closures	Nonpoint Source	Medium	1.48	Miles		
				DDT	Fish Consumption Advisory for DDT.	High	1.48	Miles		
				PCBs	Fish Consumption Advisory for PCBs.	High	1.48	Miles		
					Nonpoint Source					
4	C	CASTLEROCK BEACH	405.13	Beach Closures	Nonpoint Source	Medium	0.81	Miles		

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				DDT		High	0.81	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
					Nonpoint Source					
				PCBs		High	0.81	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
					Nonpoint Source					
4	C	DAN BLOCKER MEMORIAL (CORAL) BEACH	404.31							
				High Coliform Count		High	1.04	Miles		
					Nonpoint Source					
4	C	DOCKWEILER BEACH	405.12							
				Beach Closures		Medium	5.4	Miles		
					Nonpoint Source					
				High Coliform Count		High	5.4	Miles		
					Nonpoint Source					
4	C	ESCONDIDO BEACH	404.34							
				Beach Closures		Medium	2.05	Miles		
					Nonpoint Source					
				DDT		High	2.05	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
					Nonpoint Source					
				PCBs		High	2.05	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
					Nonpoint Source					
4	C	FLAT ROCK POINT BEACH AREA	405.11							
				Beach Closures		Medium	0.3	Miles		
					Nonpoint Source					
				DDT		High	0.3	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
					Nonpoint Source					
				PCBs		High	0.3	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
					Nonpoint Source					
4	C	HERMOSA BEACH	405.12							
				Beach Closures		Medium	1.88	Miles		
					Nonpoint Source					
4	C	INSPIRATION POINT BEACH	405.11							
				Beach Closures		Medium	0.3	Miles		
					Nonpoint Source					
				DDT		High	0.3	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
					Nonpoint Source					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

Appendix -51

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				PCBs		High	0.3	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
				Nonpoint Source						
4	C	LA COSTA BEACH	404.16	Beach Closures		Medium	0.74	Miles		
				DDT	Nonpoint Source	High	0.74	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
				Nonpoint Source						
				PCBs		High	0.74	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
				Nonpoint Source						
4	C	LAS FLORES BEACH	404.15	DDT		High	0.76	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
				Nonpoint Source						
				High Coliform Count		High	0.76	Miles		
				Nonpoint Source						
				PCBs		High	0.76	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
				Nonpoint Source						
4	C	LAS TUNAS BEACH	404.12	Beach Closures		Medium	1.25	Miles		
				Nonpoint Source						
				DDT		High	1.25	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
				Nonpoint Source						
				PCBs		High	1.25	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
				Nonpoint Source						
4	C	LEO CARILLO BEACH (SOUTH OF COUNTY LINE)	404.44	Beach Closures		Medium	1.15	Miles		
				Nonpoint Source						
				High Coliform Count		High	1.15	Miles		
				Nonpoint Source						
4	C	LONG POINT BEACH	405.11	DDT		High	0.45	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
				Nonpoint Source						
				High Coliform Count		High	0.45	Miles		
				Nonpoint Source						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				PCBs		High	0.45	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
				Nonpoint Source						
4	C	LUNADA BAY BEACH	405.11							
				Beach Closures		Medium	0.35	Miles		
				Nonpoint Source						
4	C	MALAGA COVE BEACH	405.11							
				Beach Closures		Medium	1.13	Miles		
				Nonpoint Source						
				DDT		High	1.13	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
				Nonpoint Source						
				PCBs		High	1.13	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
				Nonpoint Source						
4	C	MALIBU BEACH	404.21							
				Beach Closures		Medium	0.53	Miles		
				Nonpoint Source						
				DDT		High	0.53	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
				Nonpoint Source						
4	C	MALIBU LAGOON BEACH (SURFRIDER)	404.21							
				Beach Closures		Medium	0.66	Miles		
				Nonpoint Source						
				DDT		High	0.66	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
				Nonpoint Source						
				High Coliform Count		High	0.66	Miles		
				Nonpoint Source						
				PCBs		High	0.66	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
				Nonpoint Source						
4	C	MANDALAY BEACH	403.11							
				Beach Closures		Low	1.55	Miles		
				Nonpoint Source						
4	C	MANHATTAN BEACH	405.12							
				Beach Closures		Medium	2.08	Miles		
				Nonpoint Source						
4	C	MARINA DEL REY HARBOR BEACH	405.13							
				Beach Closures		Medium	0.65	Miles		
				Nonpoint Source						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	C	MCGRATH BEACH	403.11	High Coliform Count	Nonpoint Source	High	0.65	Miles		
				Beach Closures	Nonpoint Source	Low	1.35	Miles		
				High Coliform Count	Nonpoint Source	Medium	1.35	Miles		
					Nonpoint Source					
4	C	NICHOLAS CANYON BEACH	404.43	Beach Closures	Nonpoint Source	Medium	1.94	Miles		
				DDT	Nonpoint Source	High	1.94	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
				PCBs	Nonpoint Source	High	1.94	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
4	C	PALO VERDE SHORELINE PARK BEACH	413.057		Nonpoint Source					
				Pathogens	Source Unknown	Low	0.12	Miles		
				Pesticides	Source Unknown	Low	0.12	Miles		
					Source Unknown					
4	C	PARADISE COVE BEACH	404.35	Beach Closures	Nonpoint Source	Medium	1.33	Miles		
				DDT	Nonpoint Source	High	1.33	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
				High Coliform Count	Nonpoint Source	High	1.33	Miles		
				PCBs	Nonpoint Source	High	1.33	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
4	C	POINT DUME BEACH	404.36		Nonpoint Source					
				Beach Closures	Nonpoint Source	Medium	0.95	Miles		
				DDT	Nonpoint Source	High	0.95	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
4	C	POINT DUME BEACH	404.36	PCBs	Nonpoint Source	High	0.95	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
					Nonpoint Source					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	C	POINT FERMIN PARK BEACH	405.11	Beach Closures		Medium	1.5	Miles		
				DDT	Nonpoint Source	High	1.5	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
				PCBs	Nonpoint Source	High	1.5	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
4	C	POINT VICENTE BEACH	405.11	Beach Closures		Medium	2.13	Miles		
					Nonpoint Source					
4	C	PORTUGESE BEND BEACH	405.11	Beach Closures		Medium	2.2	Miles		
				DDT	Nonpoint Source	High	2.2	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
				PCBs	Nonpoint Source	High	2.2	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
4	C	PUERCO BEACH	404.31	Beach Closures		Medium	1.68	Miles		
				DDT	Nonpoint Source	High	1.68	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
				PCBs	Nonpoint Source	High	1.68	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
4	C	REDONDO BEACH	405.12	Beach Closures		Medium	1.37	Miles		
				DDT	Nonpoint Source	High	1.37	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
				High Coliform Count	Nonpoint Source	High	1.37	Miles		
				PCBs	Nonpoint Source	High	1.37	Miles		

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	C	RESORT POINT BEACH	405.11	Beach Closures	Nonpoint Source	Medium	0.49	Miles		
4	C	ROBERT H MEYER MEMORIAL BEACH	404.42	Beach Closures	Nonpoint Source	Medium	1.23	Miles		
				DDT	Fish Consumption Advisory for DDT. Nonpoint Source	High	1.23	Miles		
				PCBs	Fish Consumption Advisory for PCBs. Nonpoint Source	High	1.23	Miles		
4	C	ROCKY POINT BEACH	405.11	Beach Closures	Nonpoint Source	Medium	0.52	Miles		
4	C	ROYAL PALMS BEACH	405.11	Beach Closures	Nonpoint Source	Medium	1.06	Miles		
				DDT	Fish Consumption Advisory for DDT. Nonpoint Source	High	1.06	Miles		
				PCBs	Fish Consumption Advisory for PCBs. Nonpoint Source	High	1.06	Miles		
4	C	SANTA CLARA RIVER ESTUARY BEACH/SURFERS KNOLL	403.11	High Coliform Count	Nonpoint Source	Low	0.56	Miles		
4	C	SANTA MONICA BEACH	405.13	Beach Closures	Nonpoint Source	Medium	2.95	Miles		
				High Coliform Count	Nonpoint Source	High	2.95	Miles		
4	C	SEA LEVEL BEACH	404.41	Beach Closures	Nonpoint Source	Medium	0.67	Miles		
				DDT	Fish Consumption Advisory for DDT. Nonpoint Source	High	0.67	Miles		
				PCBs	Fish Consumption Advisory for PCBs. Nonpoint Source	High	0.67	Miles		

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	C	TOPANGA BEACH	404.11	Beach Closures		Medium	1.01	Miles		
				DDT	Nonpoint Source	High	1.01	Miles		
				Fish Consumption Advisory for DDT.						
				High Coliform Count	Nonpoint Source	High	1.01	Miles		
				PCBs	Nonpoint Source	High	1.01	Miles		
4	C	TORRANCE BEACH	405.12	Fish Consumption Advisory for PCBs.						
				Beach Closures	Nonpoint Source	Medium	0.58	Miles		
				High Coliform Count	Nonpoint Source	High	0.58	Miles		
4	C	TRANCAS BEACH (BROAD BEACH)	404.37	Beach Closures		Medium	2.02	Miles		
				DDT	Nonpoint Source	High	2.02	Miles		
				Fish Consumption Advisory for DDT.						
				High Coliform Count	Nonpoint Source	High	2.02	Miles		
				PCBs	Nonpoint Source	High	2.02	Miles		
4	C	VENICE BEACH	405.13	Fish Consumption Advisory for PCBs.						
				Beach Closures	Nonpoint Source	Medium	1.5	Miles		
				High Coliform Count	Nonpoint Source	High	1.5	Miles		
4	C	WHITES POINT BEACH	405.11	Beach Closures		Medium	0.7	Miles		
				DDT	Nonpoint Source	High	0.7	Miles		
				Fish Consumption Advisory for DDT.						
				PCBs	Nonpoint Source	High	0.7	Miles		
				Fish Consumption Advisory for PCBs.						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	C	WILL ROGERS BEACH	405.13	Beach Closures	Nonpoint Source	Medium	2.2	Miles		
				High Coliform Count	Nonpoint Source	High	2.2	Miles		
4	C	ZUMA (WESTWARD BEACH)	404.36	Beach Closures	Nonpoint Source	Medium	1.65	Miles		
				DDT	Fish Consumption Advisory for DDT. Nonpoint Source	High	1.65	Miles		
				PCBs	Fish Consumption Advisory for PCBs. Nonpoint Source	High	1.65	Miles		
4	E	MALIBU LAGOON	404.21	Benthic Comm. Effects	Nonpoint/Point Source	Medium	32.5	Acres		
				Enteric Viruses	Nonpoint/Point Source	High	32.5	Acres		
				Eutrophic	Nonpoint/Point Source	Medium	32.5	Acres	0193	1202
				High Coliform Count	Nonpoint/Point Source	High	32.5	Acres		
				Shellfish Harvesting Adv.	Nonpoint/Point Source	Medium	32.5	Acres		
				Swimming Restrictions	Nonpoint/Point Source	High	32.5	Acres		
4	E	MUGU LAGOON	403.11	Chlordane	Elevated levels of chlordane in tissue. Nonpoint Source	High	2000	Acres	1298	
				Copper	Nonpoint/Point Source	Medium	2000	Acres		
				Dacthal	Elevated levels of dacthal in tissue. Nonpoint Source	High	2000	Acres	1298	
				DDT	Elevated levels of DDT in tissue and sediment. Effects on bird reproductivity from DDT. Nonpoint Source	High	2000	Acres	1298	
				Endosulfan	Elevated levels of endosulfan in tissue. Nonpoint Source	High	2000	Acres	1298	
				Mercury	Nonpoint/Point Source	High	2000	Acres		

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Nickel		Medium	2000	Acres		
					Nonpoint/Point Source					
				Nitrogen		Low	2000	Acres	1298	
					Nonpoint/Point Source					
				PCBs		High	2000	Acres		
				<i>Elevated levels of PCBs in tissue.</i>						
					Nonpoint/Point Source					
				Sediment Toxicity		High	2000	Acres		
					Nonpoint/Point Source					
				Sedimentation/Siltation		High	2000	Acres		
					Nonpoint/Point Source					
				Zinc		Medium	2000	Acres		
					Nonpoint/Point Source					
4	L	CRYSTAL LAKE	405.43							
				Org. enrichment/Low D.O.		Low	5.8	Acres		
					Nonpoint Source					
4	L	ECHO PARK LAKE	405.15							
				Algae		Low	23	Acres		
					Nonpoint Source					
				Ammonia		Low	23	Acres	0194	1299
					Nonpoint Source					
				Copper		Low	23	Acres		
					Nonpoint Source					
				Eutrophic		Low	23	Acres		
					Nonpoint Source					
				Lead		Low	23	Acres		
					Nonpoint Source					
				Odors		Low	23	Acres		
					Nonpoint Source					
				PCBs		Medium	23	Acres		
				<i>Elevated levels of PCBs in tissue.</i>						
					Nonpoint Source					
				pH		Medium	23	Acres		
					Nonpoint Source					
				Trash		High	23	Acres		
					Nonpoint Source					
4	L	EL DORADO LAKES	405.15							
				Algae		Low	220	Acres		
					Nonpoint Source					
				Ammonia		Low	220	Acres	0194	1299
					Nonpoint Source					
				Copper		Low	220	Acres		
					Nonpoint Source					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Eutrophic	Nonpoint Source	Low	220	Acres		
				Lead	Nonpoint Source	Low	220	Acres		
				Mercury <i>Elevated levels of mercury in tissue.</i>	Nonpoint Source	Medium	220	Acres		
				pH	Nonpoint Source	Medium	220	Acres		
4	L	ELIZABETH LAKE	403.51	Eutrophic	Nonpoint Source	Low	194	Acres		
				Org. enrichment/Low D.O.	Nonpoint Source	Medium	194	Acres		
				pH	Nonpoint Source	Medium	194	Acres		
				Trash	Nonpoint Source	Low	194	Acres		
4	L	LAKE CALABASAS	405.21	Ammonia	Nonpoint Source	Low	28	Acres		
				Copper <i>Elevated levels of copper in tissue.</i>	Nonpoint Source	Medium	28	Acres		
				DDT <i>Elevated levels of DDT in tissue.</i>	Nonpoint Source	High	28	Acres		
				Eutrophic	Nonpoint Source	Medium	28	Acres		
				Odors	Nonpoint Source	Low	28	Acres		
				Org. enrichment/Low D.O.	Nonpoint Source	Medium	28	Acres		
				pH	Nonpoint Source	Medium	28	Acres		
				Zinc <i>Elevated levels of zinc in tissue.</i>	Nonpoint Source	Low	28	Acres		
4	L	LAKE HUGHES	403.51	Algae	Nonpoint Source	Low	34	Acres		
				Eutrophic	Nonpoint Source	Medium	34	Acres		

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

Appendix -60

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	L	LAKE LINDERO	404.23	Fish Kills	Nonpoint Source	Medium	34	Acres		
				Odors		Low	34	Acres		
				Trash		Low	34	Acres		
					Nonpoint Source					
				Algae	Nonpoint Source	Medium	13.56	Acres		
				Chloride		Low	13.56	Acres		
				Eutrophic		Medium	13.56	Acres	0193	1202
				Odors	Nonpoint Source	Low	13.56	Acres		
				Selenium		Low	13.56	Acres		
				<i>Elevated levels of selenium in tissue.</i>						
4	L	LAKE SHERWOOD	404.26		Nonpoint Source					
				Specific conductivity	Nonpoint Source	Low	13.56	Acres		
				Trash		Low	13.56	Acres		
					Nonpoint Source					
				Algae	Nonpoint Source	Medium	213	Acres		
				Ammonia		Low	213	Acres		
				Eutrophic		Medium	213	Acres	0193	1202
				Mercury	Nonpoint Source	Medium	213	Acres		
				<i>Elevated levels of mercury in tissue.</i>						
4	L	LEGG LAKE	405.41	Org. enrichment/Low D.O.	Nonpoint Source	Medium	213	Acres		
				Ammonia	Nonpoint Source	Low	70	Acres		
				Copper		Low	70	Acres		
				Lead		Low	70	Acres		
				Odors	Nonpoint Source	Low	70	Acres		

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

Appendix -61

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				pH	Nonpoint Source	Medium	70	Acres		
				Trash	Nonpoint Source	High	70	Acres		
4	L	LINCOLN PARK LAKE	405.15	Ammonia	Nonpoint Source	Low	7	Acres	0194	1299
				Eutrophic	Nonpoint Source	Medium	7	Acres		
				Lead	Nonpoint Source	Low	7	Acres		
				Odors	Nonpoint Source	Low	7	Acres		
				Org. enrichment/Low D.O.	Nonpoint Source	Medium	7	Acres		
				Trash	Nonpoint Source	High	7	Acres		
4	L	MACHADO LAKE (HARBOR PARK LAKE)	405.12	Algae	Nonpoint Source	Low	45.2	Acres		
				Ammonia	Nonpoint Source	Low	45.2	Acres		
				Chema	Nonpoint Source	High	45.2	Acres		
				<i>Elevated levels of chema pesticides in tissue.</i>						
				Chlordane	Nonpoint Source	High	45.2	Acres		
				<i>Elevated levels of chlordane in tissue. Fish Consumption Advisory for chlordane.</i>						
				DDT	Nonpoint Source	High	45.2	Acres		
				<i>Elevated levels of DDT in tissue. Fish Consumption Advisory for DDT.</i>						
				Dieldrin	Nonpoint Source	High	45.2	Acres		
				<i>Elevated levels of dieldrin in tissue.</i>						
				Eutrophic	Nonpoint Source	Low	45.2	Acres		
				Odors	Nonpoint Source	Low	45.2	Acres		
				PCBs	Nonpoint Source	High	45.2	Acres		
				<i>Elevated levels of PCBs in tissue.</i>						
				Trash	Nonpoint Source	Low	45.2	Acres		

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	L	MALIBOU LAKE	404.24	Algae	Nonpoint Source	Medium	69	Acres		
				Chlordane		Low	69	Acres		
				<i>Elevated levels of chlordane in tissue.</i>						
					Nonpoint/Point Source					
				Copper		Medium	69	Acres		
				<i>Elevated levels of copper in tissue.</i>						
					Nonpoint Source					
				Eutrophic		Medium	69	Acres	0193	1202
					Nonpoint Source					
				Org. enrichment/Low D.O.		Medium	69	Acres		
					Nonpoint Source					
				PCBs		Low	69	Acres		
				<i>Elevated levels of PCBs in tissue.</i>						
					Nonpoint Source					
4	L	MATILJA RESERVOIR	402.20	Fish barriers		Low	198	Acres		
					Dam Construction/Operation					
4	L	MCGRATH LAKE (ESTUARY)	403.11	Chlordane		High	1.35	Acres		
				<i>Elevated levels of chlordane in sediment.</i>						
					Nonpoint Source					
				DDT		High	1.35	Acres		
				<i>Elevated levels of DDT in sediment.</i>						
					Nonpoint Source					
				Pesticides		High	1.35	Acres		
				<i>Elevated levels of pesticides (total) in sediment.</i>						
					Nonpoint Source					
				Sediment Toxicity		Medium	1.35	Acres		
					Nonpoint Source					
4	L	MUNZ LAKE	403.51	Eutrophic		Low	15	Acres		
					Nonpoint Source					
				Trash		Low	15	Acres		
					Nonpoint Source					
4	L	PECK ROAD PARK LAKE	405.41	Chlordane		Medium	166	Acres		
				<i>Elevated levels of chlordane in tissue.</i>						
					Nonpoint Source					
				DDT		Medium	166	Acres		
				<i>Elevated levels of DDT in tissue.</i>						
					Nonpoint Source					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

Appendix -63

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Lead	Nonpoint Source	Low	166	Acres		
				Odors	Nonpoint Source	Low	166	Acres		
				Org. enrichment/Low D.O.	Nonpoint Source	Medium	166	Acres		
				Trash	Nonpoint Source	High	166	Acres		
4	L	PUDDINGSTONE RESERVOIR	405.52	Chlordane		Medium	382	Acres		
				<i>Elevated levels of chlordane in tissue.</i>	Nonpoint Source					
				DDT		Medium	382	Acres		
				<i>Elevated levels of DDT in tissue.</i>	Nonpoint Source					
				Mercury		Medium	382	Acres		
				<i>Elevated levels of mercury in tissue.</i>	Nonpoint Source					
				Org. enrichment/Low D.O.		Medium	382	Acres		
				<i>Elevated levels of mercury in tissue.</i>	Nonpoint Source					
				PCBs		Medium	382	Acres		
				<i>Elevated levels of PCBs in tissue.</i>	Nonpoint Source					
4	L	SANTA FE DAM PARK LAKE	405.41	Copper		Low	70	Acres		
				Lead		Low	70	Acres		
				pH		Low	70	Acres		
4	L	WESTLAKE LAKE	404.25	Algae		Medium	186	Acres		
				Ammonia		Low	186	Acres		
				Chlordane		Low	186	Acres		
				<i>Elevated levels of chlordane in tissue.</i>	Nonpoint Source					
				Copper		Medium	186	Acres		
				<i>Elevated levels of copper in tissue.</i>	Nonpoint Source					
				Eutrophic		Medium	186	Acres	0193	1202

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

Appendix -64

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Lead		Low	186	Acres		
					Nonpoint Source					
				Org. enrichment/Low D.O.		Medium	186	Acres		
					Nonpoint Source					
4	R	ALISO CANYON WASH	405.21							
				Selenium		Low	10.13	Miles		
					Nonpoint Source					
4	R	ARROYO LAS POSAS REACH 1 (LEWIS SOMIS RD TO FOX BARRANCA)	403.12							
				Ammonia		High	1.99	Miles	1298	
					Nonpoint/Point Source					
				Chloride		Medium	1.99	Miles	0197	1200
					Nonpoint/Point Source					
				DDT		High	1.99	Miles	1298	
				<i>Elevated levels of DDT in sediment.</i>						
					Nonpoint Source					
				Nitrate and Nitrite		Medium	1.99	Miles	1298	
					Nonpoint/Point Source					
				Sulfates		Medium	1.99	Miles		
					Nonpoint/Point Source					
				Total Dissolved Solids		Medium	1.99	Miles	1298	
					Nonpoint/Point Source					
4	R	ARROYO LAS POSAS REACH 2 (FOX BARRANCA TO MOORPARK FWY (23))	403.62							
				Ammonia		High	9.62	Miles	1298	
					Nonpoint/Point Source					
				Chloride		Medium	9.62	Miles	0197	1200
					Nonpoint/Point Source					
				DDT		High	9.62	Miles	1298	
				<i>Elevated levels of DDT in sediment.</i>						
					Nonpoint Source					
				Nitrate and Nitrite		Medium	9.62	Miles	1298	
					Nonpoint/Point Source					
				Sulfates		Medium	9.62	Miles		
					Nonpoint/Point Source					
				Total Dissolved Solids		Medium	9.62	Miles		
					Nonpoint/Point Source					
4	R	ARROYO SECO REACH 1 (LA RIVER TO WEST HOLLY AVE)	405.15							
				Algae		Low	7.02	Miles		
					Nonpoint Source					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				High Coliform Count	Nonpoint Source	Medium	7.02	Miles		
				Trash	Nonpoint Source	High	7.02	Miles		
4	R	ARROYO SECO REACH 2 (WEST HOLLY AVE. TO DEVILS GATE DAM)	405.31							
				Algae	Nonpoint Source	Low	2.53	Miles		
				High Coliform Count	Nonpoint Source	Medium	2.53	Miles		
				Trash	Nonpoint Source	High	2.53	Miles		
4	R	ARROYO SIMI REACH 1 (MOORPARK FRWY (23) TO BREA CYN)	403.62							
				Ammonia	Nonpoint/Point Source	High	7.58	Miles	1298	
				Boron	Nonpoint Source	Medium	7.58	Miles		
				Chloride	Nonpoint Source	Medium	7.58	Miles	0197	1200
				Chromium	Nonpoint/Point Source	Low	7.58	Miles		
				<i>Elevated levels of chromium in tissue.</i>						
				Nickel	Nonpoint/Point Source	Low	7.58	Miles		
				<i>Elevated levels of nickel in tissue.</i>						
				Selenium	Nonpoint/Point Source	Low	7.58	Miles		
				<i>Elevated levels of selenium in tissue.</i>						
				Silver	Nonpoint/Point Source	Low	7.58	Miles		
				<i>Elevated levels of silver in tissue.</i>						
				Sulfates	Nonpoint Source	Medium	7.58	Miles		
				Total Dissolved Solids	Nonpoint Source	Medium	7.58	Miles		
				Zinc	Nonpoint/Point Source	Low	7.58	Miles		
				<i>Elevated levels of zinc in tissue.</i>						
4	R	ARROYO SIMI REACH 2 (ABOVE BREA CANYON)	403.67							
				Boron	Nonpoint Source	Medium	11.12	Miles		

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

Appendix -66

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Sulfates	Nonpoint Source	Medium	11.12	Miles		
				Total Dissolved Solids	Nonpoint Source	Medium	11.12	Miles		
4	R	ASHLAND AVENUE DRAIN	405.13	High Coliform Count	Nonpoint Source	High	0.57	Miles		
				Org. enrichment/Low D.O.	Nonpoint Source	Low	0.57	Miles		
				Toxicity	Nonpoint Source	Low	0.57	Miles		
4	R	BALLONA CREEK	405.13	Arsenic <i>Elevated levels of arsenic in tissue.</i>	Nonpoint/Point Source	Medium	4.3	Miles		
				Cadmium <i>Elevated levels of cadmium in sediment.</i>	Nonpoint/Point Source	Medium	4.3	Miles		
				ChemA <i>Elevated levels of chemA pesticides in tissue.</i>	Nonpoint/Point Source	High	4.3	Miles		
				Chlordane <i>Elevated levels of chlordane in tissue.</i>	Nonpoint/Point Source	High	4.3	Miles		
				Copper <i>Elevated levels of copper in tissue and sediment.</i>	Nonpoint/Point Source	Medium	4.3	Miles		
				DDT <i>Elevated levels of DDT in tissue.</i>	Nonpoint/Point Source	High	4.3	Miles		
				Dieldrin <i>Elevated levels of dieldrin in tissue.</i>	Nonpoint/Point Source	High	4.3	Miles		
				Enteric Viruses	Nonpoint/Point Source	High	4.3	Miles		
				High Coliform Count	Nonpoint/Point Source	High	4.3	Miles		
				Lead <i>Elevated levels of lead in tissue and sediment.</i>	Nonpoint/Point Source	Low	4.3	Miles		
				PCBs <i>Elevated levels of PCBs in tissue.</i>	Nonpoint/Point Source	High	4.3	Miles		
				Sediment Toxicity	Nonpoint/Point Source	Medium	4.3	Miles		

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

Appendix -67

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Silver		Low	4.3	Miles		
				<i>Elevated levels of silver in tissue and sediment.</i>						
					Nonpoint/Point Source					
				Toxicity		Medium	4.3	Miles		
					Nonpoint/Point Source					
				Trash		High	4.3	Miles		
					Nonpoint/Point Source					
				Tributyltin		Low	4.3	Miles		
				<i>Elevated levels of tributyltin in sediment.</i>						
					Nonpoint/Point Source					
4	R	BALLONA CREEK ESTUARY	405.13							
				Arochlor		High	2.5	Miles		
				<i>Elevated levels of arochlor in sediment.</i>						
					Nonpoint/Point Source					
				Chlordane		High	2.5	Miles		
				<i>Elevated levels of chlordane in tissue and sediment.</i>						
					Nonpoint/Point Source					
				DDT		High	2.5	Miles		
				<i>Elevated levels of DDT in sediment.</i>						
					Nonpoint/Point Source					
				High Coliform Count		High	2.5	Miles		
					Nonpoint/Point Source					
				Lead		Low	2.5	Miles		
				<i>Elevated levels of lead in sediment.</i>						
					Nonpoint/Point Source					
				PAHs		High	2.5	Miles		
				<i>Elevated levels of PAHs in sediment.</i>						
					Nonpoint/Point Source					
				PCBs		High	2.5	Miles		
				<i>Elevated levels of PCBs in tissue and sediment.</i>						
					Nonpoint/Point Source					
				Sediment Toxicity		Medium	2.5	Miles		
					Nonpoint/Point Source					
				Shellfish Harvesting Adv.		Medium	2.5	Miles		
					Nonpoint/Point Source					
				Zinc		Low	2.5	Miles		
				<i>Elevated levels of zinc in sediment.</i>						
					Nonpoint/Point Source					
4	R	BEARDSLEY CHANNEL (ABOVE CENTRAL AVENUE)	403.61							
				Algae		Low	6.16	Miles	1298	
					Nonpoint Source					
				ChemA		High	6.16	Miles	1298	
				<i>Elevated levels of chemA pesticides in tissue.</i>						
					Nonpoint Source					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

Appendix -68

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Chlordane		High	6.16	Miles	1298	
				<i>Elevated levels of chlordane in tissue and sediment.</i>						
					Nonpoint Source					
				Chlorpyrifos		High	6.16	Miles	1298	
				<i>Elevated levels of chlorpyrifos in tissue.</i>						
					Nonpoint Source					
				Dacthal		High	6.16	Miles	1298	
				<i>Elevated levels of dacthal in sediment.</i>						
					Nonpoint Source					
				DDT		High	6.16	Miles	1298	
				<i>Elevated levels of DDT in tissue and sediment.</i>						
					Nonpoint Source					
				Dieldrin		High	6.16	Miles	1298	
				<i>Elevated levels of dieldrin in tissue.</i>						
					Nonpoint Source					
				Endosulfan		High	6.16	Miles	1298	
				<i>Elevated levels of endosulfan in tissue and sediment.</i>						
					Nonpoint Source					
				Nitrogen		Medium	6.16	Miles	1298	
					Nonpoint Source					
				PCBs		High	6.16	Miles		
				<i>Elevated levels of PCBs in tissue.</i>						
					Nonpoint Source					
				Toxaphene		High	6.16	Miles	1298	
				<i>Elevated levels of toxaphene in tissue and sediment.</i>						
					Nonpoint Source					
				Toxicity		High	6.16	Miles		
					Nonpoint Source					
				Trash		Low	6.16	Miles		
					Nonpoint Source					
4	R	BELL CREEK	405.21							
				High Coliform Count		Low	9.81	Miles		
					Nonpoint/Point Source					
4	R	BROWN BARRANCA / LONG CANYON	403.11							
				Nitrate and Nitrite		Medium	3.79	Miles		
					Nonpoint Source					
4	R	BURBANK WESTERN CHANNEL	405.21							
				Algae		Low	6.35	Miles		
					Nonpoint/Point Source					
				Ammonia		High	6.35	Miles	0194	1299
					Nonpoint/Point Source					
				Cadmium		Low	6.35	Miles		
					Nonpoint/Point Source					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Odors	Nonpoint/Point Source	Low	6.35	Miles		
				Scum/Foam-unnatural	Nonpoint/Point Source	Low	6.35	Miles		
				Trash	Nonpoint/Point Source	High	6.35	Miles		
4	R	CALLEGUAS CREEK REACH 1 (ESTUARY TO 0.5MI S OF BROOME RD)	403.11							
				Ammonia	Nonpoint/Point Source	High	2.2	Miles	1298	
				ChemA	Nonpoint Source	High	2.2	Miles	1298	
				<i>Elevated levels of chemA in tissue.</i>						
				Chlordane	Nonpoint Source	High	2.2	Miles	1298	
				<i>Elevated levels of chlordane in tissue.</i>						
				DDT	Nonpoint Source	High	2.2	Miles	1298	
				<i>Elevated levels of DDT in tissue and sediment.</i>						
				Endosulfan	Nonpoint Source	High	2.2	Miles	1298	
				<i>Elevated levels of endosulfan in tissue.</i>						
				Nitrogen	Nonpoint/Point Source	Medium	2.2	Miles	1298	
				PCBs	Nonpoint/Point Source	High	2.2	Miles		
				<i>Elevated levels of PCBs in tissue.</i>						
				Sediment Toxicity	Nonpoint/Point Source	Medium	2.2	Miles		
				Toxaphene	Nonpoint Source	High	2.2	Miles	1298	
				<i>Elevated levels of toxaphene in tissue and sediment.</i>						
				Toxicity	Nonpoint/Point Source	High	2.2	Miles		
4	R	CALLEGUAS CREEK REACH 2 (0.5 MI S OF BROOME RD TO POTRERO RD)	403.12							
				Ammonia	Nonpoint/Point Source	High	2.3	Miles	1298	
				ChemA	Nonpoint Source	High	2.3	Miles	1298	
				<i>Elevated levels of chemA pesticides in tissue.</i>						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May 99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	CALLEGUAS CREEK REACH 3 (POTRERO TO SOMIS RD)	403.12	Chlordane		High	2.3	Miles	1298	
				<i>Elevated level of chlordane in tissue.</i>						
					Nonpoint Source					
				Dacthal		High	2.3	Miles	1298	
				<i>Elevated level of dacthal in tissue.</i>						
					Nonpoint Source					
				DDT		High	2.3	Miles	1298	
				<i>Elevated level of DDT in tissue and sediment.</i>						
					Nonpoint Source					
				Endosulfan		High	2.3	Miles	1298	
				<i>Elevated level of endosulfan in tissue.</i>						
					Nonpoint Source					
4	R	COMPTON CREEK	405.15	Nitrogen		Medium	2.3	Miles	1298	
					Nonpoint/Point Source					
				PCBs		High	2.3	Miles		
				<i>Elevated level of PCBs in tissue.</i>						
					Nonpoint/Point Source					
				Sediment Toxicity		Medium	2.3	Miles		
					Nonpoint/Point Source					
				Toxaphene		High	2.3	Miles	1298	
				<i>Elevated level of toxaphene in tissue and sediment.</i>						
					Nonpoint Source					
				Toxicity		High	2.3	Miles		
					Nonpoint/Point Source					
4	R	CALLEGUAS CREEK REACH 3 (POTRERO TO SOMIS RD)	403.12	Chloride		Medium	7.7	Miles	0197	1200
					Nonpoint/Point Source					
				Nitrate and Nitrite		Medium	7.7	Miles	1298	
					Nonpoint/Point Source					
				Total Dissolved Solids		Medium	7.7	Miles		
					Nonpoint/Point Source					
				Copper		Low	8.52	Miles		
					Nonpoint/Point Source					
4	R	COMPTON CREEK	405.15	High Coliform Count		Medium	8.52	Miles		
					Nonpoint/Point Source					
				Lead		Low	8.52	Miles		
					Nonpoint/Point Source					
				pH		Medium	8.52	Miles		
					Nonpoint/Point Source					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	CONEJO CREEK / ARROYO CONEJO NORTH FORK	403.64	Ammonia	Nonpoint/Point Source	High	6.51	Miles	1298	
				Chlordane	Nonpoint Source	Medium	6.51	Miles	1298	
				<i>Elevated levels of chlordane in tissue.</i>						
				DDT	Nonpoint Source	Medium	6.51	Miles	1298	
				<i>Elevated levels of DDT in tissue.</i>						
				Sulfates	Nonpoint/Point Source	Medium	6.51	Miles		
				Total Dissolved Solids	Nonpoint/Point Source	Medium	6.51	Miles		
4	R	CONEJO CREEK REACH 1 (CONFL CALL TO SANTA ROSA RD)	403.12	Algae	Nonpoint/Point Source	Low	5.8	Miles	1298	
				Ammonia	Nonpoint/Point Source	High	5.8	Miles	1298	
				Cadmium	Nonpoint/Point Source	Medium	5.8	Miles		
				<i>Elevated levels of cadmium in tissue.</i>						
				Chema	Nonpoint Source	High	5.8	Miles	1298	
				<i>Elevated levels of chema pesticides in tissue.</i>						
				Chromium	Nonpoint/Point Source	Medium	5.8	Miles		
				<i>Elevated levels of chromium in tissue.</i>						
				Dacthal	Nonpoint Source	High	5.8	Miles	1298	
				<i>Elevated levels of dacthal in tissue.</i>						
				DDT	Nonpoint Source	High	5.8	Miles	1298	
				<i>Elevated levels of DDT in tissue.</i>						
				Endosulfan	Nonpoint Source	High	5.8	Miles	1298	
				<i>Elevated levels of endosulfan in tissue.</i>						
				Nickel	Nonpoint/Point Source	Medium	5.8	Miles		
				<i>Elevated levels of nickel in tissue.</i>						
				Org. enrichment/Low D.O.	Nonpoint/Point Source	Medium	5.8	Miles		

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	CONEJO CREEK REACH 2 (SANTA ROSA RD TO THO. OAKS CITY LIMIT)	403.63	Silver		Medium	5.8	Miles		
				<i>Elevated levels of silver in tissue.</i>						
					Nonpoint/Point Source					
				Sulfates		Medium	5.8	Miles		
					Nonpoint/Point Source					
				Total Dissolved Solids		Medium	5.8	Miles		
					Nonpoint/Point Source					
				Toxaphene		High	5.8	Miles	1298	
				<i>Elevated levels of toxaphene in tissue and sediment.</i>						
					Nonpoint Source					
				Toxicity		High	5.8	Miles		
					Nonpoint/Point Source					
				Algae		Low	2.67	Miles	1298	
					Nonpoint/Point Source					
				Ammonia		High	2.67	Miles	1298	
					Nonpoint/Point Source					
				Cadmium		Medium	2.67	Miles		
				<i>Elevated levels of cadmium in tissue.</i>						
					Nonpoint/Point Source					
				ChemA		High	2.67	Miles	1298	
				<i>Elevated levels of chemA pesticides in tissue.</i>						
					Nonpoint Source					
				Chloride		Medium	2.67	Miles	0197	1200
					Nonpoint/Point Source					
				Chromium		Medium	2.67	Miles		
				<i>Elevated levels of chromium in tissue.</i>						
					Nonpoint/Point Source					
				Dacthal		High	2.67	Miles	1298	
				<i>Elevated levels of dacthal in tissue.</i>						
					Nonpoint Source					
				DDT		High	2.67	Miles	1298	
				<i>Elevated levels of DDT in tissue.</i>						
					Nonpoint Source					
				Endosulfan		High	2.67	Miles	1298	
				<i>Elevated levels of endosulfan in tissue.</i>						
					Nonpoint Source					
				Nickel		Medium	2.67	Miles		
				<i>Elevated levels of nickel in tissue.</i>						
					Nonpoint/Point Source					
				Org. enrichment/Low D.O.		Medium	2.67	Miles		
					Nonpoint/Point Source					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Silver		Medium	2.67	Miles		
				<i>Elevated levels of silver in tissue.</i>						
					Nonpoint/Point Source					
				Sulfates		Medium	2.67	Miles		
					Nonpoint/Point Source					
				Total Dissolved Solids		Medium	2.67	Miles		
					Nonpoint/Point Source					
				Toxaphene		High	2.67	Miles	1298	
				<i>Elevated levels of toxaphene in tissue and sediment.</i>						
					Nonpoint Source					
				Toxicity		High	2.67	Miles		
					Nonpoint/Point Source					
4	R	CONEJO CREEK REACH 3 (THOUSAND OAKS CITY LIMIT TO LYNN RD.)	403.64							
				Algae		Low	5.6	Miles	1298	
					Nonpoint/Point Source					
				Ammonia		High	5.6	Miles	1298	
					Nonpoint/Point Source					
				Cadmium		Medium	5.6	Miles		
				<i>Elevated levels of cadmium in tissue.</i>						
					Nonpoint/Point Source					
				ChemA		High	5.6	Miles	1298	
				<i>Elevated levels of chemA pesticides in tissue.</i>						
					Nonpoint Source					
				Chromium		Medium	5.6	Miles		
				<i>Elevated levels of chromium in tissue.</i>						
					Nonpoint/Point Source					
				Dacthal		High	5.6	Miles	1298	
				<i>Elevated levels of dacthal in tissue.</i>						
					Nonpoint Source					
				DDT		High	5.6	Miles	1298	
				<i>Elevated levels of DDT in tissue.</i>						
					Nonpoint Source					
				Endosulfan		High	5.6	Miles	1298	
				<i>Elevated levels of endosulfan in tissue.</i>						
					Nonpoint Source					
				Nickel		Medium	5.6	Miles		
				<i>Elevated levels of nickel in tissue.</i>						
					Nonpoint/Point Source					
				Org. enrichment/Low D.O.		Medium	5.6	Miles		
					Nonpoint/Point Source					
				Silver		Medium	5.6	Miles		
				<i>Elevated levels of silver in tissue.</i>						
					Nonpoint/Point Source					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	CONEJO CREEK REACH 4 (ABOVE LYNN RD.)	403.68	Sulfates	Nonpoint/Point Source	Medium	5.6	Miles		
				Total Dissolved Solids	Nonpoint/Point Source	Medium	5.6	Miles		
				Toxaphene	Nonpoint Source	High	5.6	Miles	1298	
				<i>Elevated levels of toxaphene in tissue and sediment.</i>						
				Toxicity	Nonpoint/Point Source	High	5.6	Miles		
				Algae	Nonpoint/Point Source	Low	4.98	Miles		
				Ammonia	Nonpoint/Point Source	High	4.98	Miles	1298	
				ChemA	Nonpoint Source	High	4.98	Miles	1298	
				<i>Elevated levels of chemA pesticides in tissue.</i>						
				Chloride	Nonpoint/Point Source	Medium	4.98	Miles	0197	1200
				Dacthal	Nonpoint Source	High	4.98	Miles	1298	
				<i>Elevated levels of dacthal in tissue.</i>						
				DDT	Nonpoint Source	High	4.98	Miles	1298	
				<i>Elevated levels of DDT in tissue.</i>						
				Endosulfan	Nonpoint Source	High	4.98	Miles	1298	
				<i>Elevated levels of endosulfan in tissue.</i>						
				Org. enrichment/Low D.O.	Nonpoint/Point Source	Medium	4.98	Miles		
				Sulfates	Nonpoint/Point Source	Medium	4.98	Miles		
				Total Dissolved Solids	Nonpoint/Point Source	Medium	4.98	Miles		
				Toxaphene	Nonpoint Source	High	4.98	Miles	1298	
				<i>Elevated levels of toxaphene in tissue and sediment.</i>						
4	R	COYOTE CREEK	405.15	Toxicity	Nonpoint/Point Source	High	4.98	Miles		
				Abnormal Fish Histology	Nonpoint/Point Source	Medium	13.45	Miles		
				Algae	Nonpoint/Point Source	Medium	13.45	Miles		

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Ammonia	Nonpoint/Point Source	High	13.45	Miles		
				High Coliform Count	Nonpoint/Point Source	Medium	13.45	Miles		
				Silver	Nonpoint/Point Source	Medium	13.45	Miles		
				<i>Elevated levels of silver in tissue.</i>						
					Nonpoint/Point Source					
4	R	DOMINGUEZ CHANNEL (ABOVE VERMONT)	405.12							
				Aldrin	Nonpoint/Point Source	Medium	9	Miles		
				<i>Elevated levels of aldrin in tissue.</i>						
					Nonpoint/Point Source					
				Ammonia	Nonpoint/Point Source	Low	9	Miles		
					Nonpoint/Point Source					
				ChemA	Nonpoint/Point Source	High	9	Miles		
				<i>Elevated levels of chemA pesticides in tissue.</i>						
					Nonpoint/Point Source					
				Chlordane	Nonpoint/Point Source	High	9	Miles		
				<i>Elevated levels of chlordane in tissue.</i>						
					Nonpoint/Point Source					
				Chromium	Nonpoint/Point Source	Medium	9	Miles		
				<i>Elevated levels of chromium in sediment.</i>						
					Nonpoint/Point Source					
				Copper	Nonpoint/Point Source	Low	9	Miles		
					Nonpoint/Point Source					
				DDT	Nonpoint/Point Source	High	9	Miles		
				<i>Elevated levels of DDT in tissue and sediment.</i>						
					Nonpoint/Point Source					
				Dieldrin	Nonpoint/Point Source	Medium	9	Miles		
				<i>Elevated levels of dieldrin in tissue.</i>						
					Nonpoint/Point Source					
				High Coliform Count	Nonpoint/Point Source	Low	9	Miles		
					Nonpoint/Point Source					
				Lead	Nonpoint/Point Source	Low	9	Miles		
				<i>Elevated levels of lead in tissue.</i>						
					Nonpoint/Point Source					
				PAHs	Nonpoint/Point Source	High	9	Miles		
				<i>Elevated levels of PAHs in sediment.</i>						
					Nonpoint/Point Source					
				PCBs	Nonpoint/Point Source	High	9	Miles		
				<i>Elevated levels of PCBs in tissue.</i>						
					Nonpoint/Point Source					
				Zinc	Nonpoint/Point Source	High	9	Miles		
				<i>Elevated levels of zinc in sediment.</i>						
					Nonpoint/Point Source					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May 99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	DOMINGUEZ CHANNEL ESTUARY (TO VERMONT)	405.12							
				Aldrin		Medium	8.4	Miles		
				<i>Elevated levels of aldrin in tissue.</i>						
					Nonpoint/Point Source					
				Ammonia		Low	8.4	Miles		
					Nonpoint/Point Source					
				Benthic Comm. Effects		High	8.4	Miles		
					Nonpoint/Point Source					
				ChemA		High	8.4	Miles		
				<i>Elevated levels of chemA pesticides in tissue.</i>						
					Nonpoint/Point Source					
				Chlordane		High	8.4	Miles		
				<i>Elevated levels of chlordane in tissue.</i>						
					Nonpoint/Point Source					
				Chromium		Medium	8.4	Miles		
				<i>Elevated levels of chromium in sediment.</i>						
					Nonpoint/Point Source					
				Copper		Low	8.4	Miles		
					Nonpoint/Point Source					
				DDT		High	8.4	Miles		
				<i>Elevated levels of DDT in tissue and sediment.</i>						
					Nonpoint/Point Source					
				Dieldrin		Medium	8.4	Miles		
				<i>Elevated levels of dieldrin in tissue.</i>						
					Nonpoint/Point Source					
				High Coliform Count		Low	8.4	Miles		
					Nonpoint/Point Source					
				Lead		Low	8.4	Miles		
				<i>Elevated levels of lead in tissue.</i>						
					Nonpoint/Point Source					
				PAHs		High	8.4	Miles		
				<i>Elevated levels of PAHs in sediment.</i>						
					Nonpoint/Point Source					
				PCBs		High	8.4	Miles		
				<i>Elevated levels of PCBs in tissue.</i>						
					Nonpoint/Point Source					
				Zinc		High	8.4	Miles		
				<i>Elevated levels of zinc in sediment.</i>						
					Nonpoint/Point Source					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	DUCK POND AGRICULTURAL DRAIN/MUGU DRAIN/OXNARD DR #2	403.11							
				ChemA		High	13.5	Miles	1298	
				<i>Elevated levels of chemA pesticides in tissue.</i>						
				Nonpoint Source						
				Chlordane		High	13.5	Miles	1298	
				<i>Elevated levels of chlordane in tissue.</i>						
				Nonpoint Source						
				DDT		High	13.5	Miles	1298	
				<i>Elevated levels of DDT in tissue and sediment.</i>						
				Nonpoint Source						
				Nitrogen		Medium	13.5	Miles	1298	
				Nonpoint Source						
				Sediment Toxicity		Medium	13.5	Miles		
				Nonpoint Source						
				Toxaphene		High	13.5	Miles	1298	
				<i>Elevated levels of toxaphene in tissue.</i>						
				Nonpoint Source						
				Toxicity		High	13.5	Miles		
				Nonpoint Source						
4	R	FOX BARRANCA	403.62							
				Boron		Medium	3.03	Miles		
				Nonpoint Source						
				Nitrate and Nitrite		Medium	3.03	Miles	1298	
				Nonpoint Source						
				Sulfates		Medium	3.03	Miles		
				Nonpoint Source						
				Total Dissolved Solids		Medium	3.03	Miles		
				Nonpoint Source						
4	R	LAS VIRGENES CREEK	404.22							
				High Coliform Count		High	11.47	Miles		
				Nonpoint Source						
				Nutrients (Algae)		Medium	11.47	Miles	0193	1202
				Nonpoint Source						
				Org. enrichment/Low D.O.		Medium	11.47	Miles		
				Nonpoint Source						
				Scum/Foam-unnatural		Low	11.47	Miles		
				Nonpoint Source						
				Selenium		Low	11.47	Miles		
				Nonpoint Source						
				Trash		Low	11.47	Miles		
				Nonpoint Source						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	LINDERO CREEK REACH 1	404.23	Algae	Nonpoint Source	Medium	2.2	Miles		
				High Coliform Count	Nonpoint Source	High	2.2	Miles		
				Scum/Foam-unnatural	Nonpoint Source	Low	2.2	Miles		
				Selenium	Nonpoint Source	Low	2.2	Miles		
				Trash	Nonpoint Source	Low	2.2	Miles		
4	R	LINDERO CREEK REACH 2 (ABOVE LAKE)	404.23	Algae	Nonpoint Source	Medium	4.8	Miles		
				High Coliform Count	Nonpoint Source	High	4.8	Miles		
				Scum/Foam-unnatural	Nonpoint Source	Low	4.8	Miles		
				Selenium	Nonpoint Source	Low	4.8	Miles		
				Trash	Nonpoint Source	Low	4.8	Miles		
4	R	LOS ANGELES RIVER REACH 1 (ESTUARY TO CARSON STREET)	405.12	Ammonia	Nonpoint/Point Source	High	2.01	Miles	0194	1299
				High Coliform Count	Nonpoint/Point Source	Medium	2.01	Miles		
				Lead	Nonpoint/Point Source	Low	2.01	Miles		
				Nutrients (Algae)	Nonpoint/Point Source	Medium	2.01	Miles	0194	1299
				pH	Nonpoint/Point Source	Medium	2.01	Miles		
				Scum/Foam-unnatural	Nonpoint/Point Source	Low	2.01	Miles		
				Trash	Nonpoint/Point Source	High	2.01	Miles		
4	R	LOS ANGELES RIVER REACH 2 (CARSON TO FIGUEROA STREET)	405.15	Ammonia	Nonpoint/Point Source	High	19.37	Miles	0194	1299

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				High Coliform Count	Nonpoint/Point Source	Medium	19.37	Miles	0194	1299
				Lead		Low	19.37	Miles		
				Nutrients (Algae)		Medium	19.37	Miles		
				Odors		Low	19.37	Miles		
				Oil		Medium	19.37	Miles		
				Scum/Foam-unnatural		Low	19.37	Miles		
				Trash		High	19.37	Miles		
					Nonpoint/Point Source					
4	R	LOS ANGELES RIVER REACH 3 (FIGUEROA ST TO RIVERSIDE DR.)	405.21							
				Ammonia	Nonpoint/Point Source	High	7.24	Miles	0194	1299
				Nutrients (Algae)		Medium	7.24	Miles	0194	1299
				Odors		Low	7.24	Miles		
				Scum/Foam-unnatural		Low	7.24	Miles		
				Trash		High	7.24	Miles		
					Nonpoint/Point Source					
4	R	LOS ANGELES RIVER REACH 4 (SEPULVEDA DR. TO SEPULVEDA DAM)	405.21							
				Ammonia	Nonpoint/Point Source	High	11.84	Miles	0194	1299
				High Coliform Count		Medium	11.84	Miles		
				Lead		Low	11.84	Miles		
				Nutrients (Algae)		Medium	11.84	Miles	0194	1299
				Odors		Low	11.84	Miles		
				Scum/Foam-unnatural		Low	11.84	Miles		
				Trash		High	11.84	Miles		
					Nonpoint/Point Source					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May 99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	LOS ANGELES RIVER REACH 5 (AT SEPULVEDA BASIN)	405.21	Ammonia	Nonpoint/Point Source	High	1.93	Miles	0194	1299
				ChemA	Nonpoint/Point Source	Medium	1.93	Miles		
				Chlorpyrifos	Nonpoint/Point Source	Medium	1.93	Miles		
				<i>Elevated levels of chlorpyrifos in tissue.</i>						
				Nutrients (Algae)	Nonpoint/Point Source	Medium	1.93	Miles	0194	1299
				Odors	Nonpoint/Point Source	Low	1.93	Miles		
				Oil	Nonpoint/Point Source	Low	1.93	Miles		
				Scum/Foam-unnatural	Nonpoint/Point Source	Low	1.93	Miles		
				Trash	Nonpoint/Point Source	High	1.93	Miles		
4	R	LOS ANGELES RIVER REACH 6 (ABOVE SEPULVEDA FLD CNTRL BASIN)	405.21	Dichloroethylene/1,1-DCE	Nonpoint Source	Low	6.17	Miles		
				High Coliform Count	Nonpoint Source	Low	6.17	Miles		
				Tetrachloroethylene/PCE	Nonpoint Source	Low	6.17	Miles		
				Trichloroethylene/TCE	Nonpoint Source	Low	6.17	Miles		
4	R	MALIBU CREEK	404.21	Fish barriers	Dam Construction/Operation	Low	9.5	Miles		
				High Coliform Count	Nonpoint/Point Source	High	9.5	Miles		
				Nutrients (Algae)	Nonpoint/Point Source	Medium	9.5	Miles	0193	1202
				Scum/Foam-unnatural	Nonpoint/Point Source	Low	9.5	Miles		
				Trash	Nonpoint Source	Low	9.5	Miles		

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	MATILJA CREEK REACH 1 (JCT. WITH N. FORK TO RESERVOIR)	402.20	Fish barriers		Low	1.6	Miles		
					Dam Construction/Operation					
4	R	MATILJA CREEK REACH 2 (ABOVE RESERVOIR)	402.20	Fish barriers		Low	16.8	Miles		
					Dam Construction/Operation					
4	R	MEDEA CREEK REACH 1 (LAKE TO CONFL. WITH LINDERO)	404.23	Algae	Nonpoint Source	Medium	3.01	Miles		
				High Coliform Count	Nonpoint Source	High	3.01	Miles		
				Selenium	Nonpoint Source	Low	3.01	Miles		
				Trash	Nonpoint Source	Low	3.01	Miles		
4	R	MEDEA CREEK REACH 2 (ABV COFL. WITH LINDERO)	404.24	Algae	Nonpoint Source	Medium	5.44	Miles		
				High Coliform Count	Nonpoint Source	High	5.44	Miles		
				Selenium	Nonpoint Source	Low	5.44	Miles		
				Trash	Nonpoint Source	Low	5.44	Miles		
4	R	MINT CANYON CREEK REACH 1 (CONFL TO ROWLER CYN)	403.51	Nitrate and Nitrite	Nonpoint Source	Medium	8.16	Miles		
4	R	MONROVIA CANYON CREEK	405.33	Lead	Nonpoint Source	Low	2.09	Miles		
4	R	PALO COMADO CREEK	404.23	High Coliform Count	Nonpoint Source	High	7.78	Miles		
4	R	PICO KENTER DRAIN	405.13	Ammonia	Nonpoint Source	Low	4.77	Miles		
				Copper	Nonpoint Source	Medium	4.77	Miles		

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

Appendix -82

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May 99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Enteric Viruses	Nonpoint Source	High	4.77	Miles		
				High Coliform Count	Nonpoint Source	High	4.77	Miles		
				Lead	Nonpoint Source	Low	4.77	Miles		
				PAHs	Nonpoint Source	High	4.77	Miles		
				Toxicity	Nonpoint Source	Medium	4.77	Miles		
				Trash	Nonpoint Source	Low	4.77	Miles		
4	R	REVOLON SLOUGH MAIN BRANCH (MUGU LAGOON TO CENTRAL AVENUE)	403.11							
				Algae	Nonpoint Source	Low	8.9	Miles	1298	
				ChemA	Nonpoint Source	High	8.9	Miles	1298	
				<i>Elevated levels of chemA pesticides in tissue.</i>						
				Chlordane	Nonpoint Source	High	8.9	Miles	1298	
				<i>Elevated levels of chlordane in tissue and sediment.</i>						
				Chlorpyrifos	Nonpoint Source	High	8.9	Miles	1298	
				<i>Elevated levels of chlorpyrifos in tissue.</i>						
				Dacthal	Nonpoint Source	High	8.9	Miles	1298	
				<i>Elevated levels of dacthal in sediment.</i>						
				DDT	Nonpoint Source	High	8.9	Miles	1298	
				<i>Elevated levels of DDT in tissue and sediment.</i>						
				Dieldrin	Nonpoint Source	High	8.9	Miles	1298	
				<i>Elevated levels of dieldrin in tissue.</i>						
				Endosulfan	Nonpoint Source	High	8.9	Miles	1298	
				<i>Elevated levels of endosulfan in tissue and sediment.</i>						
				Nitrogen	Nonpoint Source	Medium	8.9	Miles	1298	
				PCBs	Nonpoint Source	High	8.9	Miles		
				<i>Elevated levels of PCBs in tissue.</i>						
				Selenium	Nonpoint Source	Low	8.9	Miles		

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Toxaphene		High	8.9	Miles	1298	
				<i>Elevated levels of toxaphene in tissue and sediment.</i>						
					Nonpoint Source					
				Toxicity		High	8.9	Miles		
					Nonpoint Source					
				Trash		Low	8.9	Miles		
					Nonpoint Source					
4	R	RIO DE SANTA CLARA/OXNARD DRAIN #3	403.11							
				ChemA		High	2.48	Miles	1298	
				<i>Elevated levels of chemA pesticides in tissue.</i>						
					Nonpoint Source					
				Chlordane		High	2.48	Miles	1298	
				<i>Elevated levels of chlordane in tissue.</i>						
					Nonpoint Source					
				DDT		High	2.48	Miles	1298	
				<i>Elevated levels of DDT in tissue.</i>						
					Nonpoint Source					
				Nitrogen		Low	2.48	Miles	1298	
					Nonpoint Source					
				PCBs		High	2.48	Miles		
				<i>Elevated levels of PCBs in tissue.</i>						
					Nonpoint Source					
				Sediment Toxicity		High	2.48	Miles		
					Nonpoint Source					
				Toxaphene		High	2.48	Miles	1298	
				<i>Elevated levels of toxaphene in tissue.</i>						
					Nonpoint Source					
4	R	RIO HONDO REACH 1 (CONFL. LA RIVER TO SNT ANA FWY)	405.15							
				Ammonia		Low	4.19	Miles	0194	1299
					Nonpoint/Point Source					
				Copper		Low	4.19	Miles		
					Nonpoint/Point Source					
				High Coliform Count		Low	4.19	Miles		
					Nonpoint/Point Source					
				Lead		Low	4.19	Miles		
					Nonpoint/Point Source					
				pH		Low	4.19	Miles		
					Nonpoint/Point Source					
				Trash		High	4.19	Miles		
					Nonpoint/Point Source					
				Zinc		Low	4.19	Miles		
					Nonpoint/Point Source					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	RIO HONDO REACH 2 (AT SPREADING GROUNDS)	405.15	Ammonia	Nonpoint/Point Source	Medium	2.71	Miles	0194	1299
				High Coliform Count	Nonpoint/Point Source	Low	2.71	Miles		
4	R	SAN GABRIEL RIVER EAST FORK	405.43	Trash	Nonpoint Source	High	12	Miles		
4	R	SAN GABRIEL RIVER ESTUARY	405.15	Abnormal Fish Histology	Nonpoint/Point Source	Medium	2.95	Miles		
				Arsenic	Nonpoint/Point Source	Low	2.95	Miles		
				<i>Elevated levels of arsenic in tissue.</i>						
4	R	SAN GABRIEL RIVER REACH 1 (ESTUARY TO FIRESTONE)	405.15	Abnormal Fish Histology	Nonpoint/Point Source	Medium	8.73	Miles		
				Algae	Nonpoint/Point Source	Medium	8.73	Miles		
				Ammonia	Nonpoint/Point Source	High	8.73	Miles		
				High Coliform Count	Nonpoint/Point Source	Low	8.73	Miles		
				Toxicity	Nonpoint/Point Source	Medium	8.73	Miles		
4	R	SAN GABRIEL RIVER REACH 2 (FIRESTONE TO WHITTIER NARROWS DAM)	405.15	Ammonia	Nonpoint/Point Source	High	9.99	Miles		
				High Coliform Count	Nonpoint/Point Source	Low	9.99	Miles		
				Lead	Nonpoint/Point Source	Low	9.99	Miles		
4	R	SAN GABRIEL RIVER REACH 3 (WHITTIER NARROWS TO RAMONA)	405.41	Toxicity	Nonpoint/Point Source	Medium	3.52	Miles		

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	SAN JOSE CREEK REACH 1 (SG CONFL. TO TEMPLE STREET)	405.41	Algae	Nonpoint/Point Source	Medium	13.12	Miles		
				Ammonia	Nonpoint/Point Source	High	13.12	Miles		
				High Coliform Count	Nonpoint/Point Source	Low	13.12	Miles		
4	R	SAN JOSE CREEK REACH 2 (TEMPLE TO I-10 AT WHITE AVE.)	405.51	Algae	Nonpoint/Point Source	Medium	4.93	Miles		
				Ammonia	Nonpoint/Point Source	High	4.93	Miles		
				High Coliform Count	Nonpoint/Point Source	Low	4.93	Miles		
4	R	SANTA CLARA RIVER ESTUARY	403.11	ChemA	Nonpoint Source	Medium	2.07	Miles		
				High Coliform Count	Nonpoint Source	Low	2.07	Miles		
				Toxaphene	Nonpoint Source	Medium	2.07	Miles		
4	R	SANTA CLARA RIVER REACH 3 (DAM TO ABV SP CRK/BLW TIMBER CYN)	403.21	Ammonia	Nonpoint/Point Source	Medium	13.24	Miles		
				Chloride	Nonpoint/Point Source	Medium	13.24	Miles	1297	
4	R	SANTA CLARA RIVER REACH 7 (BLUE CUT TO WEST PIER HWY 99)	403.51	Ammonia	Nonpoint/Point Source	Medium	9.21	Miles		
				Chloride	Nonpoint/Point Source	Medium	9.21	Miles	1297	
				Chloride was relisted by USEPA	Nonpoint/Point Source					
				High Coliform Count	Nonpoint/Point Source	Low	9.21	Miles		
				Nitrate and Nitrite	Nonpoint/Point Source	Medium	9.21	Miles		

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	SANTA CLARA RIVER REACH 8-W PIER HY 99 TO BOUQUET CYN RD BRG	403.51	Ammonia	Nonpoint/Point Source	Medium	3.42	Miles		
				Chloride	Nonpoint/Point Source	Medium	3.42	Miles	1297	
				Chloride was relisted by USEPA.						
				High Coliform Count	Nonpoint/Point Source	Low	3.42	Miles		
				Nitrate and Nitrite	Nonpoint/Point Source	Medium	3.42	Miles		
				Org. enrichment/Low D.O.	Nonpoint/Point Source	Medium	3.42	Miles		
4	R	SANTA CLARA RIVER REACH 9 (BOUQUET CYN RD.TO ABV LANG GAGNG)	403.51	High Coliform Count	Nonpoint/Point Source	Low	12.69	Miles		
4	R	SANTA MONICA CANYON	405.13	High Coliform Count	Nonpoint Source	High	2.9	Miles		
				Lead	Nonpoint Source	Low	2.9	Miles		
4	R	SEPULVEDA CANYON	405.13	Ammonia	Nonpoint Source	Low	6.8	Miles		
				High Coliform Count	Nonpoint Source	High	6.8	Miles		
				Lead	Nonpoint Source	Low	6.8	Miles		
4	R	STOKES CREEK	404.22	High Coliform Count	Nonpoint Source	High	5.33	Miles		
4	R	TAPO CANYON REACH 1	403.67	Boron	Nonpoint/Point Source	Medium	5.23	Miles		
				Chloride	Nonpoint/Point Source	Medium	5.23	Miles	0197	1200
				Sulfates	Nonpoint/Point Source	Medium	5.23	Miles		
				Total Dissolved Solids	Nonpoint/Point Source	Medium	5.23	Miles		

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	TOPANGA CANYON CREEK	404.11	Lead	Nonpoint Source	Low	8.6	Miles		
4	R	TORRANCE CARSON CHANNEL	405.12	Copper	Nonpoint Source	Low	12.6	Miles		
				High Coliform Count	Nonpoint Source	Medium	12.6	Miles		
				Lead	Nonpoint Source	Low	12.6	Miles		
4	R	TORREY CANYON CREEK	403.41	Nitrate and Nitrite	Nonpoint Source	Medium	1.7	Miles		
4	R	TRIUNFO CANYON CREEK REACH 1	404.24	Lead	Nonpoint Source	Low	4.06	Miles		
				Mercury	Nonpoint Source	Low	4.06	Miles		
4	R	TRIUNFO CANYON CREEK REACH 2	404.25	Lead	Nonpoint Source	Low	1.98	Miles		
				Mercury	Nonpoint Source	Low	1.98	Miles		
4	R	TUJUNGA WASH (LA RIVER TO HANSEN DAM)	405.21	Ammonia	Nonpoint Source	Medium	9.68	Miles	0194	1299
				Copper	Nonpoint Source	Medium	9.68	Miles		
				High Coliform Count	Nonpoint Source	Low	9.68	Miles		
				Odors	Nonpoint Source	Low	9.68	Miles		
				Scum/Foam-unnatural	Nonpoint Source	Low	9.68	Miles		
				Trash	Nonpoint Source	High	9.68	Miles		
4	R	VENTURA RIVER ESTUARY	402.10	Algae	Nonpoint/Point Source	Low	0.35	Miles		

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

Appendix -88

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	VENTURA RIVER REACH 1 (ESTUARY TO MAIN STREET)	402.10	DDT		Medium	0.35	Miles		
				<i>Elevated levels of DDT in tissue.</i>						
					Nonpoint/Point Source					
				Eutrophic		Low	0.35	Miles		
					Nonpoint/Point Source					
				Trash		Low	0.35	Miles		
					Nonpoint/Point Source					
				Algae		Low	0.18	Miles		
					Nonpoint/Point Source					
				Copper		Low	0.18	Miles		
				<i>Elevated levels of copper in tissue.</i>						
					Nonpoint/Point Source					
4	R	VENTURA RIVER REACH 2 (MAIN ST. TO WELDON CANYON)	402.10	Silver		Medium	0.18	Miles		
				<i>Elevated levels of silver in tissue.</i>						
					Nonpoint/Point Source					
				Zinc		Low	0.18	Miles		
				<i>Elevated levels of zinc in tissue.</i>						
					Nonpoint/Point Source					
				Algae		Low	4.64	Miles		
					Nonpoint/Point Source					
				Copper		Low	4.64	Miles		
				<i>Elevated levels of copper in tissue.</i>						
					Nonpoint/Point Source					
				Selenium		Low	4.64	Miles		
4	R	VENTURA RIVER REACH 3 (WELDON CANYON TO CONFL. W/ COYOTE CR)	402.10	<i>Elevated levels of selenium in tissue.</i>						
					Nonpoint/Point Source					
				Silver		Medium	4.64	Miles		
				<i>Elevated levels of silver in tissue.</i>						
					Nonpoint/Point Source					
				Zinc		Low	4.64	Miles		
				<i>Elevated levels of zinc in tissue.</i>						
					Nonpoint/Point Source					
				Pumping		Low	0.78	Miles		
					Nonpoint Source					
				Water Diversion		Low	0.78	Miles		
					Nonpoint Source					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	VENTURA RIVER REACH 4 (COYOTE CREEK TO CAMINO CIELO RD.)	402.20	Pumping	Nonpoint Source	Low	14.94	Miles		
				Water Diversion	Nonpoint Source	Low	14.94	Miles		
4	R	VERDUGO WASH REACH 1 (LA RIVER TO VERDUGO RD.)	405.21	Algae	Nonpoint Source	Low	3.41	Miles		
				High Coliform Count	Nonpoint Source	Low	3.41	Miles		
				Trash	Nonpoint Source	High	3.41	Miles		
4	R	VERDUGO WASH REACH 2 (ABOVE VERDUGO ROAD)	405.24	Algae	Nonpoint Source	Low	5.55	Miles		
				High Coliform Count	Nonpoint Source	Low	5.55	Miles		
				Trash	Nonpoint Source	High	5.55	Miles		
4	R	WALNUT CREEK WASH (DRAINS FROM PUDDINGSTONE RESERVOIR)	405.41	pH	Nonpoint/Point Source	High	13.9	Miles		
				Toxicity	Nonpoint/Point Source	Medium	13.9	Miles		
4	R	WHEELER CANYON / TODD BARRANCA	403.21	Nitrate and Nitrite	Nonpoint Source	Medium	4.17	Miles		
4	R	WILMINGTON DRAIN	405.12	Ammonia	Nonpoint Source	Medium	4.9	Miles		
				Copper	Nonpoint Source	Low	4.9	Miles		
				High Coliform Count	Nonpoint Source	Low	4.9	Miles		
				Lead	Nonpoint Source	Low	4.9	Miles		

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	T	BALLONA CREEK WETLANDS	405.13	Arsenic <i>Elevated levels of arsenic in tissue.</i>	Nonpoint Source	Medium	86	Acres		
				Exotic Vegetation	Nonpoint Source	Low	86	Acres		
				Habitat alterations	Nonpoint Source	Low	86	Acres		
				Hydromodification	Nonpoint Source	Low	86	Acres		
				Reduced Tidal Flushing	Nonpoint Source	Low	86	Acres		
				Trash	Nonpoint Source	High	86	Acres		
4	T	COLORADO LAGOON	405.12	Chlordane <i>Elevated levels of chlordane in tissue and sediment.</i>	Nonpoint Source	High	13.6	Acres		
				DDT <i>Elevated levels of DDT in tissue.</i>	Nonpoint Source	High	13.6	Acres		
				Dieldrin <i>Elevated levels of dieldrin in tissue.</i>	Nonpoint Source	Medium	13.6	Acres		
				Lead <i>Elevated levels of lead in tissue and sediment.</i>	Nonpoint Source	Medium	13.6	Acres		
				PAHs <i>Elevated levels of PAHs in sediment.</i>	Nonpoint Source	High	13.6	Acres		
				PCBs <i>Elevated levels of PCBs in tissue.</i>	Nonpoint Source	High	13.6	Acres		
				Sediment Toxicity	Nonpoint Source	Medium	13.6	Acres		
				Zinc <i>Elevated levels of zinc in sediment.</i>	Nonpoint Source	Medium	13.6	Acres		
4	T	LOS CERRITOS CHANNEL	405.15	Ammonia	Nonpoint Source	Low	16	Acres		
				Copper	Nonpoint Source	Low	16	Acres		

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				High Coliform Count	Nonpoint Source	Low	16	Acres		
				Lead	Nonpoint Source	Low	16	Acres		
				Zinc	Nonpoint Source	Medium	16	Acres		
5	E	DELTA WATERWAYS	544.000	Chlorpyrifos	Agriculture Urban Runoff/Storm Sewers	High	480000	Acres	0198	1205
				DDT	Agriculture	Low	480000	Acres	0104	1211
				Diazinon	Agriculture Urban Runoff/Storm Sewers	High	480000	Acres	0198	1205
				Electrical Conductivity	Agriculture	Medium	16000	Acres	0101	1211
				Group A Pesticides	Agriculture	Low	480000	Acres	0104	1211
				Mercury	Resource extraction sources are abandoned mines. Resource Extraction	High	480000	Acres	0198	1205
				Org. enrichment/Low D.O.	Municipal Point Sources Urban Runoff/Storm Sewers	High	75	Acres	0101	1211
				Unknown Toxicity	Source Unknown	Medium	480000	Acres	0101	1211
5	L	BERRYESSA LAKE	512.210	Mercury	Resource Extraction	High	20700	Acres	0198	1205
5	L	CLEAR LAKE	513.520	Mercury	Resource Extraction	High	43000	Acres	0198	1205
				Nutrients	Source Unknown	Low	43000	Acres	0104	1211
5	L	DAVIS CREEK RES	513.320	Mercury	Resource Extraction	Medium	290	Acres	0198	1211
5	L	KESWICK RES	524.400	Cadmium	Resource Extraction	Medium	200	Acres	0198	1211
				Copper	Resource Extraction	Medium	200	Acres	0198	1211

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

Appendix -92

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
5	L	MARSH CREEK RES	543.000	Zinc	Resource Extraction	Medium	200	Acres	0198	1211
				Mercury	Resource Extraction	Medium	375	Acres	0198	1211
5	L	SHASTA LAKE	506.100	Cadmium	Resource Extraction	Low	20	Acres	0104	1211
				Copper	Resource Extraction	Low	20	Acres	0104	1211
				Zinc	Resource Extraction	Low	20	Acres	0104	1211
				High Coliform Count	Septage Disposal	Low	100	Acres	0104	1211
				Group A Pesticides	Urban Runoff/Storm Sewers	Low	23	Miles	0104	1211
5	R	AMERICAN RIVER, LOWER	519.210	Mercury	Resource extraction sources are abandoned mines.	Medium	23	Miles	0101	1211
				Unknown Toxicity	Resource Extraction	Low	23	Miles	0104	1211
					Source Unknown					
				Chlorpyrifos	Urban Runoff/Storm Sewers	Medium	10	Miles	0198	1211
				Diazinon	The agricultural source of diazinon for these waterbodies is from aerial deposition.	Medium	10	Miles	0198	1211
5	R	CACHE CREEK	511.300		Agriculture					
					Urban Runoff/Storm Sewers					
				Mercury	Resource extraction sources are abandoned mines.	High	35	Miles	0196	1205
				Unknown Toxicity	Resource Extraction	Medium	35	Miles	0101	1211
					Source Unknown					
5	R	CHICKEN RANCH SLOUGH	519.210	Chlorpyrifos	Urban Runoff/Storm Sewers	Medium	5	Miles	0198	1211

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Diazinon		Medium	5	Miles	0198	1211
				<i>The agricultural source of diazinon for these waterbodies is from aerial deposition.</i>						
				Agriculture						
				Urban Runoff/Storm Sewers						
5	R	COLUSA DRAIN	520.210	Carbofuran/Furadan		Medium	70	Miles	0101	1211
					Agriculture					
				Group A Pesticides		Medium	70	Miles	0101	1211
					Agriculture					
				Malathion		Medium	70	Miles	0101	1211
					Agriculture					
				Methyl Parathion		Medium	70	Miles	0101	1211
					Agriculture					
				Unknown Toxicity		Medium	70	Miles	0101	1211
					Agriculture					
5	R	DOLLY CREEK	518.540	Copper		Medium	1	Miles	0101	1211
				<i>Resource extraction sources are abandoned mines.</i>						
					Resource Extraction					
				Zinc		Medium	1	Miles	0101	1211
				<i>Resource extraction sources are abandoned mines.</i>						
					Resource Extraction					
5	R	DUNN CREEK	543.000	Mercury		Low	9	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
					Resource Extraction					
				Metals		Low	9	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
					Resource Extraction					
5	R	ELDER CREEK	519.120	Chlorpyrifos		Medium	10	Miles	0198	1211
					Urban Runoff/Storm Sewers					
				Diazinon		Medium	10	Miles	0198	1211
				<i>The agricultural source of diazinon for these waterbodies is from aerial deposition.</i>						
				Agriculture						
				Urban Runoff/Storm Sewers						
5	R	ELK GROVE CREEK	519.110	Diazinon		Medium	5	Miles	0198	1211
				<i>The agricultural source of diazinon for these waterbodies is from aerial deposition.</i>						
				Agriculture						
				Urban Runoff/Storm Sewers						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May 99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
5	R	FALL RIVER (PIT)	526.400	Sedimentation/Siltation	Agriculture-grazing Highway/Road/Bridge Construction Silviculture	Medium	25	Miles	0104	1211
5	R	FEATHER RIVER, LOWER	519.220	Diazinon	Agriculture Urban Runoff/Storm Sewers	High	60	Miles	0198	1205
				Group A Pesticides	Agriculture	Low	60	Miles	0104	1211
				Mercury	Resource extraction sources are abandoned mines. Resource Extraction	Medium	60	Miles	0101	1211
				Unknown Toxicity	Source Unknown	Medium	60	Miles	0101	1211
5	R	FIVE MILE SLOUGH	544.000	Chlorpyrifos	Urban Runoff/Storm Sewers	Medium	1	Miles	0198	1211
				Diazinon	The agricultural source of diazinon for these waterbodies is from aerial deposition. Agriculture Urban Runoff/Storm Sewers	Medium	1	Miles	0198	1211
5	R	FRENCH RAVINE	516.320	Bacteria	Land Disposal	Low	1	Miles	0104	1211
5	R	HARDING DRAIN (TURLOCK IRR DIST LATERAL #5)	535.500	Ammonia	Agriculture Municipal Point Sources	Low	7	Miles	0104	1211
				Chlorpyrifos	Agriculture	Medium	7	Miles	0198	1211
				Diazinon	Agriculture	Medium	7	Miles	0198	1211
				Unknown Toxicity	Agriculture	Medium	7	Miles	0198	1211
5	R	HARLEY GULCH	513.510	Mercury	Resource extraction sources are abandoned mines. Resource Extraction	Medium	8	Miles	0101	1211

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
5	R	HORSE CREEK	526.200	Cadmium		Low	2	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Copper		Low	2	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Lead		Low	2	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Zinc		Low	2	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
5	R	HUMBUG CREEK	517.320	Copper		Low	9	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Mercury		Low	9	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Sedimentation/Siltation		Low	9	Miles	0104	1211
				Resource Extraction						
				Zinc		Low	9	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
5	R	JAMES CREEK	512.240	Mercury		Low	6	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Nickel		Low	6	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
5	R	KANAKA CREEK	517.420	Arsenic		Low	1	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
5	R	KINGS RIVER (LOWER)	551.900	Electrical Conductivity		Low	30	Miles	0104	1211
				Agriculture						
				Molybdenum		Low	30	Miles	0104	1211
				Agriculture						
				Toxaphene		Low	30	Miles	0104	1211
				Agriculture						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May 99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
5	R	LITTLE BACKBONE CREEK	506.200	Acid Mine Drainage		Medium	1	Miles	0104	1211
					Resource Extraction					
				Cadmium		Medium	1	Miles	0104	1211
					Resource extraction sources are abandoned mines.					
					Resource Extraction					
				Copper		Medium	1	Miles	0104	1211
					Resource extraction sources are abandoned mines.					
					Resource Extraction					
				Zinc		Medium	1	Miles	0104	1211
					Resource extraction sources are abandoned mines.					
					Resource Extraction					
5	R	LITTLE COW CREEK	507.330	Cadmium		Low	1	Miles	0104	1211
					Resource extraction sources are abandoned mines.					
					Resource Extraction					
				Copper		Low	1	Miles	0104	1211
					Resource extraction sources are abandoned mines.					
					Resource Extraction					
				Zinc		Low	1	Miles	0104	1211
					Resource extraction sources are abandoned mines.					
					Resource Extraction					
5	R	LITTLE GRIZZLY CREEK	518.540	Copper		Medium	10	Miles	0101	1202
					Mine Tailings					
				Zinc		Medium	10	Miles	0101	1202
					Mine Tailings					
5	R	LONE TREE CREEK	531.400	Ammonia		Low	15	Miles	0104	1211
					Dairies					
				Biological Oxygen Demand		Low	15	Miles	0104	1211
					Dairies					
				Electrical Conductivity		Low	15	Miles	0104	1211
					Dairies					
5	R	MARSH CREEK	543.000	Mercury		Low	24	Miles	0104	1211
					Resource extraction sources are abandoned mines.					
					Resource Extraction					
				Metals		Low	24	Miles	0104	1211
					Resource extraction sources are abandoned mines.					
					Resource Extraction					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
5	R	MERCED RIVER, LOWER	535.000	Chlorpyrifos	Agriculture	High	60	Miles	0198	1205
				Diazinon	Agriculture	High	60	Miles	0198	1205
				Group A Pesticides	Agriculture	Low	60	Miles	0104	1211
5	R	MOKELUMNE RIVER, LOWER	531.200	Copper	Resource extraction sources are abandoned mines. Resource Extraction	Low	28	Miles	0104	1211
				Zinc	Resource extraction sources are abandoned mines. Resource Extraction	Low	28	Miles	0104	1211
5	R	MORRISON CREEK	519.120	Diazinon	The agricultural source of diazinon for these waterbodies is from aerial deposition. Agriculture Urban Runoff/Storm Sewers	Medium	20	Miles	0198	1211
5	R	MOSHER SLOUGH	544.000	Chlorpyrifos	Urban Runoff/Storm Sewers	Medium	2	Miles	0198	1211
				Diazinon	The agricultural source of diazinon for these waterbodies is from aerial deposition. Agriculture Urban Runoff/Storm Sewers	Medium	2	Miles	0198	1211
5	R	MUD SLOUGH	541.200	Boron	Agriculture	Low	16	Miles	0101	1211
				Electrical Conductivity	Agriculture	Low	16	Miles	0101	1211
				Pesticides	Agriculture	Low	16	Miles	0101	1211
				Selenium	Agriculture	High	16	Miles	0592	1200
				Unknown Toxicity	Agriculture	Low	16	Miles	0101	1211
5	R	NATOMAS EAST MAIN DRAIN	519.220	Diazinon	The agricultural source of diazinon for these waterbodies is from aerial deposition. Agriculture Urban Runoff/Storm Sewers	Medium	5	Miles	0198	1211

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				PCBs		Low	12	Miles	0104	1211
					Industrial Point Sources					
					Urban Runoff/Storm Sewers					
5	R	ORESTIMBA CREEK	541.100	Chlorpyrifos	Agriculture	Medium	10	Miles	0198	1211
				Diazinon	Agriculture	Medium	10	Miles	0198	1211
				Unknown Toxicity	Agriculture	Medium	3	Miles	0101	1211
5	R	PANOCHÉ CREEK	542.400	Mercury	Resource extraction sources are abandoned mines.	Low	25	Miles	0104	1211
					Resource Extraction					
				Sedimentation/Siltation	Agriculture	Low	40	Miles	0104	1211
					Agriculture-grazing					
					Road Construction					
				Selenium	Agriculture	Low	40	Miles	0104	1211
					Agriculture-grazing					
					Road Construction					
5	R	PIT RIVER	506.000	Nutrients	Agriculture	Low	100	Miles	0104	1211
					Agriculture-grazing					
				Org. enrichment/Low D.O.	Agriculture	Low	100	Miles	0104	1211
					Agriculture-grazing					
				Temperature	Agriculture	Low	100	Miles	0104	1211
					Agriculture-grazing					
5	R	SACRAMENTO RIVER (RED BLUFF TO DELTA)	500.000	Diazinon	Agriculture	High	30	Miles	0198	1205
				Mercury	Resource extraction sources are abandoned mines.	High	30	Miles	0198	1205
					Resource Extraction					
				Unknown Toxicity	Source Unknown	Medium	185	Miles	0101	1211

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
5	R	SACRAMENTO RIVER (SHASTA DAM TO RED BLUFF)	508.100	Cadmium	Resource extraction sources are abandoned mines. Resource Extraction	High	40	Miles	0196	1201
				Copper	Resource extraction sources are abandoned mines. Resource Extraction	High	40	Miles	0196	1201
				Unknown Toxicity	Source Unknown	Medium	50	Miles	0101	1211
				Zinc	Resource extraction sources are abandoned mines. Resource Extraction	High	40	Miles	0196	1201
5	R	SACRAMENTO SLOUGH	520.100	Diazinon	Agriculture Urban Runoff/Storm Sewers	Medium	1	Miles	0198	1211
				Mercury	Source Unknown	Medium	1	Miles	0198	1211
5	R	SALT SLOUGH	541.200	Boron	Agriculture	Low	15	Miles	0198	1211
				Chlorpyrifos	Agriculture	Low	15	Miles	0198	1211
				Diazinon	Agriculture	Low	15	Miles	0198	1211
				Electrical Conductivity	Agriculture	Low	15	Miles	0198	1211
				Selenium	Agriculture	High	15	Miles	0592	1298
				Unknown Toxicity	Agriculture	Low	15	Miles	0198	1211
5	R	SAN CARLOS CREEK	542.200	Mercury	Resource extraction sources are abandoned mines. Resource Extraction	Low	1	Miles	0104	1211
5	R	SAN JOAQUIN RIVER	544.000	Boron	Agriculture	High	130	Miles	0697	1299
				Chlorpyrifos	Agriculture	High	130	Miles	0198	1205
				DDT	Agriculture	Low	130	Miles	0104	1211

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Diazinon	Agriculture	High	130	Miles	0198	1205
				Electrical Conductivity	Agriculture	High	130	Miles	0697	1299
				Group A Pesticides	Agriculture	Low	130	Miles	0104	1211
				Selenium	Agriculture	High	50	Miles	0592	1200
				Unknown Toxicity	Source Unknown	Medium	130	Miles	0198	1211
5	R	SPRING CREEK	524.400	Acid Mine Drainage	Resource extraction sources are abandoned mines.	High	5	Miles	0198	1211
					Resource Extraction					
				Cadmium	Resource extraction sources are abandoned mines.	High	5	Miles	0198	1211
					Resource Extraction					
				Copper	Resource extraction sources are abandoned mines.	High	5	Miles	0198	1211
					Resource Extraction					
				Zinc	Resource extraction sources are abandoned mines.	High	5	Miles	0198	1211
					Resource Extraction					
5	R	STANISLAUS RIVER (LOWER)	535.300	Diazinon	Agriculture	High	48	Miles	0198	1205
				Group A Pesticides	Agriculture	Low	48	Miles	0104	1211
				Unknown Toxicity	Source Unknown	Medium	48	Miles	0101	1211
5	R	STOCKTON DEEP WATER CHANNEL	544.000	Dioxin	This listing was made by USEPA. Point Source	Medium	2	Miles		
				Furans	This listing was made by USEPA. Point Source	Medium	2	Miles		
				PCBs	This listing was made by USEPA. Point Source	Medium	2	Miles		
5	R	STRONG RANCH SLOUGH	519.210	Chlorpyrifos	Urban Runoff/Storm Sewers	Medium	5	Miles	0198	1211

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Diazinon		Medium	5	Miles	0198	1211
				<i>The agricultural source of diazinon for these waterbodies is from aerial deposition.</i>						
				Agriculture						
				Urban Runoff/Storm Sewers						
5	R	SULFUR CREEK	513.510	Mercury		High	7	Miles	0198	1205
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
5	R	TEMPLE CREEK	531.400	Ammonia		Low	10	Miles	0104	1211
					Dairies					
				Electrical Conductivity		Low	10	Miles	0104	1211
					Dairies					
5	R	TOWN CREEK	526.200	Cadmium		Low	1	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Copper		Low	1	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Lead		Low	1	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Zinc		Low	1	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
5	R	TUOLUMNE RIVER (LOWER)	535.500	Diazinon		High	32	Miles	0198	1205
					Agriculture					
				Group A Pesticides		Low	32	Miles	0104	1211
					Agriculture					
				Unknown Toxicity		Medium	32	Miles	0101	1211
				Source Unknown						
5	R	WEST SQUAW CREEK	505.100	Cadmium		Medium	2	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Copper		Medium	2	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Lead		Medium	2	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May 99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Zinc	Resource extraction sources are abandoned mines.	Medium	2	Miles	0104	1211
					Resource Extraction					
5	R	WILLOW CREEK (WHISKEYTOWN)	524.630	Acid Mine Drainage	Resource extraction sources are abandoned mines.	Low	3	Miles	0104	1211
					Resource Extraction					
				Copper	Resource extraction sources are abandoned mines.	Low	3	Miles	0104	1211
					Resource Extraction					
				Zinc	Resource extraction sources are abandoned mines.	Low	3	Miles	0104	1211
					Resource Extraction					
5	W	GRASSLANDS MARSHES	541.200	Electrical Conductivity		Medium	8224	Acres	0101	1211
					Agriculture					
				Selenium		High	8224	Acres	0592	1298
					Agriculture					
6	L	BRIDGEPORT RES	630.300	Nutrients	Livestock grazing in wetlands upgradient of reservoir. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.	High	3000	Acres		
					Agriculture					
				Sedimentation/Siltation	Watershed disturbance including livestock grazing. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.	High	3000	Acres		
					Source Unknown					
6	L	CROWLEY LAKE	603.100	Arsenic	To be addressed as part of Watershed Management Initiative (WMI) for upper watershed, beginning with Years 3-5 of WMI program, if resources permit.	High	5280	Acres		
					Natural Sources					
				Nutrients		High	5280	Acres		
					Source Unknown					
6	L	DONNER LAKE	635.200	Priority Organics	PCBs in fish and sediment exceed Maximum Tissue Residue Level criteria; unknown nonpoint sources. Phase I Truckee River sediment TMDL projected for completion in 1999. Additional monitoring/study necessary to determine sources/cleanup potential for priority organics. TMDLs for organics to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.	Low	960	Acres		
					Source Unknown					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	L	EAGLE LAKE (2)	637.300	Org. enrichment/Low D.O. Nutrients from wastewater disposal to land, livestock grazing, other watershed disturbance. Problems being addressed through sewerage of septic system development and RWQCB's ongoing nonpoint source program. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.	Land Development Nonpoint Source Range Land Septage Disposal	High	25000	Acres		
6	L	GRANT LAKE	601.000	Arsenic Targeted for "easy" (already funded) TMDL documentation that arsenic from natural sources.	Natural Sources	High	1095	Acres	0198	0199
6	L	HAIWEE RES	603.300	Copper Copper problems related to algicide use to prevent taste/odor problems in drinking water supplies. Further biological monitoring being required. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.	Habitat Modification Nonpoint Source	Low	1800	Acres		
6	L	HORSESHOE LAKE (2)	628.000	Sedimentation/Siltation Further monitoring may permit delisting. TMDLs, if needed to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.	Construction/Land Development	Low	1	Acres		
6	L	INDIAN CREEK RES	632.200	Nutrients Reservoir formerly received tertiary-treated domestic wastewater from South Tahoe Public Utility District; unreliability of treatment process led to eutrophication. District is now restoring reservoir through flushing with fresh water.	Wastewater	High	160	Acres	0198	0199

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	L	LAKE TAHOE	634.000	Nutrients		High	120000	Acres		
				<p>Watershed disturbance, urban stormwater, atmospheric deposition. Lake is targeted for sediment and nutrient TMDLs but ability to complete them depends on availability of reliable watershed model. Model calibration, and additional watershed assessment, were funded as a result of 1997 presidential forum; TMDLs for entire watershed to be coordinated with Tahoe Regional Planning Agency's 2001 evaluation of attainment of environmental threshold standards.</p> <p>Atmospheric Deposition Construction/Land Development Drainage/Filling Of Wetlands Highway Maintenance And Runoff Hydromodification Marinas Nonpoint Source Other Urban Runoff Silviculture Urban Runoff/Storm Sewers Wastewater</p>						
				Sedimentation/Siltation		High	120000	Acres		
				<p>Watershed disturbance including logging, construction, urban and highway runoff. Development of TMDLs depends on availability of reliable watershed model. Funding for final calibration of U.C. Davis Tahoe Research group model, and for additional watershed assessment, was provided as a result of 1997 presidential forum. TMDLs to be coordinated with Tahoe Regional Planning Agency's 2001 evaluation of attainment of environmental threshold standards.</p> <p>Source Unknown</p>						
6	L	PLEASANT VALLEY RES	603.200	Org. enrichment/Low D.O.		High	115	Acres		
				<p>Problems related to watershed disturbance/reservoir management to be addressed together with problems in Crowley Lake as part of the Watershed Management Initiative; TMDLs to be addressed during years 3-5 of the next 13 years of the TMDL development process, if resources permit.</p> <p>Flow Regulation/Modification Nonpoint Source</p>						
6	L	STAMPEDE RES	636.000	Pesticides		Low	3444	Acres		
				<p>Sources unknown; no significant agriculture or residential development in watershed; feasibility of reducing loading probably low. Recalculation of Maximum Tissue Residue Level criteria makes delisting possible in next cycle. TMDLs, if needed, will be addressed during years 6-13 of the next 13 years of the TMDL development process.</p> <p>Source Unknown</p>						
6	L	TINEMAHA RES	603.200	Arsenic		Low	180	Acres		
				<p>TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.</p> <p>Natural Sources Nonpoint Source Upstream Impoundment</p>						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	L	TOPAZ LAKE	631.100	Metals		Low	180	Acres		
				Watershed disturbance, upstream geothermal sources of arsenic. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Source Unknown						
6	L	TWIN LAKES	603.100	Sedimentation/Siltation		High	2300	Acres		
				Agriculture, river channel damage during January 1997 flood. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Agriculture Nonpoint Source						
6	L	TWIN LAKES	603.100	Nutrients		Low	3	Acres		
				Watershed disturbance, urban runoff; to be addressed during years 6-13 of the next 13 years of the TMDL development process, if resources permit.						
				Land Development Nonpoint Source Other Urban Runoff						
6	R	AMARGOSA RIVER	609.000	Salinity/TDS/Chlorides		Medium	198	Miles	0198	0199
				Internally drained river with natural high salinity; targeted for "easy" (already funded) TMDL using 1998 Section 104/106 grant funds						
				Natural Sources						
6	R	ASPEN CREEK	632.100	Metals		High	4	Miles	0198	0199
				Acid drainage from Leviathan Mine; Lahontan RWQCB mine workplan to be documented as Phase I TMDL using 1998 Section 104/106 grant funds.						
				Acid Mine Drainage Natural Sources Nonpoint Source						
6	R	AURORA CANYON CREEK	630.300	Habitat alterations		Low	13	Miles		
				Livestock grazing. Listed on basis of limited data; further monitoring may permit delisting. TMDLs, if needed, to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Range Land						
6	R	BEAR CREEK (R6)	635.200	Sedimentation/Siltation		High	4	Miles	1195	0199
				Creek affected by hydrologic modification for ski resort/snow making pond-affected by sediment from pond dam break. Phase I sediment TMDL for Truckee River and tributaries projected to be completed for Basin Plan amendments in 1999, using 1998 Section 104/106 grant funds; Phase II work has received Section 205(j) funding and will begin in 1998.						
				Hydromodification Nonpoint Source						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May 99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	R	BLACKWOOD CREEK	634.200	Sedimentation/Siltation		High	8	Miles	0198	0199
				Creek affected by past gravel quarry operations and other watershed disturbance. Existing USFS restoration program to be documented as phase I "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.						
				Construction/Land Development						
				Hydromodification						
				Nonpoint Source						
				Resource Extraction						
				Silviculture						
6	R	BODIE CREEK	630.200	Metals		High	6	Miles		
				Affected by drainage from inactive mines, mine tailings in creek. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Mine Tailings						
				Nonpoint Source						
				Resource Extraction						
6	R	BRONCO CREEK	635.200	Sedimentation/Siltation		High	1	Miles	1195	0199
				Watershed disturbance in naturally highly erosive watershed; targeted for sediment TMDL as part of larger Truckee River watershed effort. Phase I TMDL to be completed in 1999 using 1998 Section 104/106 grant funds; Phase II, using Section 205j funds, to begin in 1998.						
				Natural Sources						
				Nonpoint Source						
6	R	BRYANT CREEK	632.100	Metals		High	10	Miles	0198	0199
				Affected by acid mine drainage from Leviathan Mine. Problem being addressed by RWQCB through Leviathan Mine workplan; workplan will be documented as Phase I "easy" (already funded) TMDL in 1998 using Section 104/106 grant funds.						
				Acid Mine Drainage						
				Nonpoint Source						
6	R	CARSON RIVER, E FK	632.100	Nutrients		High	1	Miles		
				Probably livestock grazing. River was listed due to data collected by State of NV near state line in 1980s, probably reflecting drought conditions. NV has since delisted the river for these pollutants. Further monitoring may support delisting in CA. TMDLs, if needed, to be addressed during years 3-5 of the next 13 years of the TMDL development process, resources permitting.						
				Nonpoint Source						
				Range Land						
6	R	CLARK CANYON CREEK	630.300	Habitat alterations		Medium	5	Miles		
				Livestock grazing. Listed on basis of very limited information. CRMP has been implemented since 1980s; further monitoring may support delisting. TMDLs, if needed, to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Range Land						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	R	CLEARWATER CREEK	630.400	Sedimentation/Siltation <i>Livestock grazing. Listed on basis of limited data; additional monitoring may support delisting. TMDLs, if needed, to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.</i>		Medium	7	Miles		
				Range Land						
6	R	COTTONWOOD CREEK (1)	603.300	Water/Flow Variability <i>Lower reach of creek affected by diversions for LADWP system; TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.</i>		High	7	Miles		
				Flow Regulation/Modification						
6	R	EAST WALKER RIVER	630.000	Metals <i>Inactive mines and other watershed disturbance; highway runoff. Listed initially due to elevated fish tissue levels; needs further monitoring for metals impacts and may be considered for delisting for metals in next cycle. TMDLs, if needed, will be addressed during years 6-13 of the next 13 years of the TMDL development process.</i>		Medium	8	Miles		
				Natural Sources Nonpoint Source Other Urban Runoff Range Land Resource Extraction						
				Sedimentation/Siltation <i>River affected by turbid releases from Bridgeport Reservoir; major sediment discharge resulted litigation by State Department of Fish and Game. Further monitoring of beneficial use recovery may support delisting. TMDLs, if needed, to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.</i>		High	8	Miles		
				Hydromodification						
6	R	GOODALE CREEK	603.300	Sedimentation/Siltation <i>Potential for delisting following further monitoring. TMDLs, if needed, to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.</i>		Low	9	Miles		
				Range Land						
6	R	GRAY CREEK (R6)	635.000	Sedimentation/Siltation <i>Disturbance of naturally highly erosive watershed; Phase I of the TMDL in progress, to be completed as Basin Plan amendment using 1998 Section 104/106 grant funds. Section 205(j) funding has been obtained for monitoring to begin in 1998 for use in Phase II of the TMDL.</i>		High	4	Miles	1195	0199
				Natural Sources Nonpoint Source						
6	R	GREEN CREEK	630.400	Habitat alterations <i>Creek affected by hydroelectric dam construction, livestock grazing. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process.</i>		Medium	1	Miles		
				Hydromodification Range Land						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May 99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	R	GREEN VALLEY LAKE CREEK	628.200	Priority Organics		Low	5	Miles		
				Priority organics (source unknown) were detected in stream in 1980's; no monitoring since. Stream needs reevaluation to determine need for listing. TMDLs, if needed, to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Source Unknown						
6	R	HEAVENLY VALLEY CREEK	634.100	Sedimentation/Siltation		High	4	Miles	0198	0199
				Creek affected by ski resort construction and maintenance activities. Recently adopted resort master plan will phase future development based on accomplishment of watershed restoration projects. Master Plan currently scheduled to be documented as Phase I "easy" (already funded) TMDL using 1998 Section 104/106 grant funds. (Needs further discussion with USFS staff; recent monitoring data indicate possible need for additional sediment modeling.)						
				Construction/Land Development						
				Habitat Modification						
				Hydromodification						
				Land Development						
				Nonpoint Source						
				Recreational Activities						
6	R	HOT CREEK (1)	631.400	Metals		Medium	5	Miles	0198	0199
				Natural geothermal drainage; targeted for "easy" (already funded) TMDL using 1998 Section 104/106 grant funds						
				Natural Sources						
6	R	HOT CREEK (2)	603.100	Metals		High	10	Miles	0198	0199
				Natural geothermal springs. Targeted for "easy" (already funded) TMDL using Section 104/106 grant funds.						
				Natural Sources						
6	R	HOT SPRINGS CANYON CREEK	630.300	Sedimentation/Siltation		Medium	1	Miles		
				Listed on basis of limited data; further monitoring may support delisting. TMDLs, if needed, to be addressed during years 6-13 of the next 13 years of the TMDL development process.						
				Range Land						
6	R	INDIAN CREEK (1)	632.200	Habitat alterations		High	7	Miles		
				Watershed disturbance from livestock grazing. TMDLs to be addressed as part of Carson River WMI implementation.						
				Pasture Land						
6	R	LASSEN CREEK	637.000	Flow alterations		Medium	6	Miles		
				Agricultural diversions. TMDL to be addressed during years 6-13 of the next 13 years of the TMDL development process, as resources permit.						
				Flow Regulation/Modification						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	R	LEE VINING CREEK	601.000	Flow alterations		High	11	Miles		
				Affected by diversions by Los Angeles Dept. of Water and Power. Court ordered restoration project is underway; will probably be documented as Phase I "easy" (already funded) TMDL during years 3-5 of the 13 years of TMDL implementation, resources permitting.						
				Flow Regulation/Modification						
6	R	LEVIATHAN CREEK	632.100	Metals		High	2	Miles	0198	0199
				Lower reach of creek affected by acid drainage from Leviathan Mine; reach has been diverted around tailings as part of ongoing pollution abatement project. Lahontan RWQCB workplan to be documented as Phase I "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.						
				Acid Mine Drainage						
6	R	LITTLE HOT CREEK	603.100	Arsenic		Medium	1	Miles	0198	1299
				Natural (geothermal?) sources: targeted for "easy" (already funded) TMDL using 1998 Section 104-106 grant funds.						
				Natural Sources						
6	R	MAMMOTH CREEK	603.100	Metals		High	22	Miles		
				Mammoth Creek is the headwaters of Hot Creek (2); However, it is affected by urban runoff from the Town of Mammoth Lakes as well as natural sources of metals. Urban runoff problems at Mammoth are being addressed through the RWQCB's ongoing regulation and enforcement problems and the WMI.						
				Natural Sources						
				Nonpoint Source						
6	R	MILL CREEK (1)	601.000	Flow alterations		High	7	Miles		
				Creek affected by water diversions. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Water Diversions						
6	R	MILL CREEK (3)	641.300	Sedimentation/Siltation		Medium	6	Miles		
				Livestock grazing. TMDL to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Range Land						
6	R	MOJAVE RIVER	628.200	Priority Organics		High	10	Miles		
				River was 303(d) listed in 1980's due to subsurface "Barstow slug" of toxic pollutants from various urban/industrial sources; later monitoring shows main "slug" has dissipated but some areas of pollution remain. River is currently a WMI priority watershed with emphasis on revision of TDS/salinity objectives. TMDLs for "mini-slug" pollutants to be addressed, if necessary, during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Hazardous Waste						
				Land Disposal						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	R	MONITOR CREEK	632.100	Metals		High	4	Miles		
				Drainage from inactive mines; other watershed disturbance. Problems to be addressed as part of Carson River WMI effort during years 3-5 of the next 13 years of TMDL development.						
				Natural Sources						
				Nonpoint Source						
				Resource Extraction						
6	R	OWENS RIVER	603.300	Arsenic		High	120	Miles		
				Arsenic from natural geothermal sources; amounts affected by reservoir management. TMDLs for Long HA (603.10) to be addressed during years 3-5 of the next 13 years of the TMDL development process, as part of WMI, if resources permit. TMDLs for Upper and Middle Owens HAs (603.20 and 603.30) to be addressed during years 6-13 if resources permit.						
				Natural Sources						
				Habitat alterations		High	120	Miles		
				TMDLs for Long HA (630.10) to be addressed in years 3-5 of the next 13 years of the TMDL development process as part of the WMI, resources permitting. TMDLs for Upper and Middle Owens HA's to be addressed during years 6-13 of the next 13 years of TMDL development, resources permitting.						
				Flow Regulation/Modification						
6	R	PINE CREEK (2)	637.300	Sedimentation/Siltation		High	24	Miles	0198	0199
				Livestock grazing; other watershed disturbance. Watershed/fisheries restoration by existing CRMP group to be documented as "easy"(already funded) TMDL, or as basis for delisting, using 1998 Section 104/106 grant funds.						
				Nonpoint Source						
				Range Land						
6	R	ROUGH CREEK	630.000	Habitat alterations		Medium	8	Miles		
				Livestock grazing impacts. Additional monitoring may provide grounds for delisting. TMDLs, if needed, to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Range Land						
6	R	SKEDADDLE CREEK	637.100	High Coliform Count		Low	5	Miles		
				Livestock grazing on BLM land led to reports of high coliform levels several years ago; current status unknown. Further monitoring may support delisting. TMDLs, if needed, will be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Range Land						
6	R	SNOW CREEK	634.200	Habitat alterations		High	1	Miles		
				Drainage/Filling Of Wetlands						
				Land Development						
				Nonpoint Source						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	R	SQUAW CREEK	635.200	Sedimentation/Siltation		High	8	Miles	1195	0199
				Watershed heavily disturbed by ski resort construction and construction of other facilities for 1960 Winter Olympics; part of creek was channelized. Lower creek has very high bedload sediment transport. Severe watershed damage occurred from January 1997 flooding. Phase I sediment TMDL to be completed using 1998 Section 104/106 grant funds; Phase II to begin in 1998 using Section 205(j) funds.						
				Construction/Land Development						
				Drainage/Filling Of Wetlands						
				Highway Maintenance And Runoff						
				Hydromodification						
				Natural Sources						
				Nonpoint Source						
				Other Urban Runoff						
				Recreational Activities						
6	R	SUSAN RIVER	637.200	Unknown Toxicity		High	59	Miles		
				River affected by natural and man-made geothermal discharges and by agricultural drainage. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Agriculture						
				Highway Maintenance And Runoff						
				Natural Sources						
				Nonpoint Source						
				Other Urban Runoff						
				Source Unknown						
6	R	TRUCKEE RIVER	635.200	Sedimentation/Siltation		High	106	Miles	1195	0199
				Watershed disturbance including ski resorts, silvicultural activities, urban development, reservoir construction and management; highly erosive subwatersheds. Phase I sediment TMDL to be completed using 1998 Section 104/106 grant funds; Phase II work, using Section 205(j) funds to begin in 1998.						
				Source Unknown						
6	R	TUTTLE CREEK	603.300	Habitat alterations		Low	10	Miles		
				Livestock grazing problems. Potential for delisting following further monitoring. TMDLs, if needed, to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Range Land						
6	R	WARD CREEK	634.200	Sedimentation/Siltation		High	7	Miles		
				Watershed disturbance. TMDLs to be developed as part of those for Lake Tahoe during years 6-13 of the next 13 years of the TMDL development process, as resources permit.						
				Land Development						
				Nonpoint Source						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	R	WEST WALKER RIVER	631.000	Sedimentation/Siltation		High	1	Miles		
				Agriculture, flooding, highway construction. (Watershed severely impacted by January 1997 flood; 8 miles of highway washed out and reconstructed under emergency regulations with no CEQA analysis.) TMDLs to be addressed through WMI process (once priority watersheds are rotated), probably during years 6-13 of the next 13 years of the TMDL development process, as resources permit.						
				Agriculture Nonpoint Source						
6	R	WOLF CREEK (1)	632.100	Sedimentation/Siltation		High	14	Miles		
				Livestock grazing. Problems to be addressed as part of Carson River WMI effort during years 3-5 of the next 13 years of the TMDL development process, resources permitting.						
				Range Land						
6	S	ALKALI LAKE, LOWER	641.000	Salinity/TDS/Chlorides		Medium	10855	Acres	0198	0199
				Natural internally drained lake; affected by agricultural diversions from tributaries. Natural impairment to be documented as "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.						
				Flow Regulation/Modification Natural Sources Nonpoint Source						
6	S	ALKALI LAKE, MIDDLE	641.000	Salinity/TDS/Chlorides		Medium	39475	Acres	0198	0199
				Natural internally drained lake affected by agricultural diversions from tributaries. Natural impairment to be documented as "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.						
				Flow Regulation/Modification Natural Sources Nonpoint Source						
6	S	ALKALI LAKE, UPPER	641.000	Salinity/TDS/Chlorides		Medium	24250	Acres	0198	0199
				Natural internally drained lake affected by agricultural diversions from tributaries. Natural impairment to be documented as "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.						
				Flow Regulation/Modification Natural Sources Nonpoint Source						
6	S	DEEP SPRINGS LAKE	605.000	Salinity/TDS/Chlorides		Medium	1400	Acres	0198	0199
				Natural internally drained lake; "natural impairment" to be documented as "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.						
				Nonpoint Source						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	S	HONEY LAKE	637.200	Arsenic		Medium	55327	Acres		
				Arsenic is from ultimately from natural sources, but amounts are affected by agricultural/geothermal drainage. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, probably in connection with TMDLs for Susan River system.						
				Flow Regulation/Modification						
				Natural Sources						
				Nonpoint Source						
				Salinity/TDS/Chlorides		Medium	55327	Acres		
				Natural internally directed lake affected by agricultural and geothermal drainage. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, as resources permit (probably in connection with TMDLs for the Susan River.)						
				Agriculture						
				Natural Sources						
				Nonpoint Source						
6	S	HONEY LAKE WILDFOWL MGMT. PONDS	637.200	Flow alterations		Medium	500	Acres		
				Ponds were affected by 1980s drought. Further monitoring may support delisting for this parameter. TMDLs, if needed, to be addressed during years 6-13 of the next 13 years of the TMDL development process.						
				Agricultural Water Diversion						
				Metals		Medium	500	Acres		
				Ponds were affected by 1980s drought; further monitoring may support delisting for this parameter. TMDLs, if needed, to be addressed during years 6-10 of the next 13 years of the TMDL development process, as resources permit.						
				Agriculture						
				Geothermal Development						
				Natural Sources						
				Salinity/TDS/Chlorides		Medium	500	Acres		
				Ponds affected by agricultural, geothermal drainage. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Agriculture						
				Geothermal Development						
				Natural Sources						
				Trace Elements		Medium	500	Acres		
				Geothermal and agricultural drainage. Further monitoring might support delisting. TMDLs, if needed, to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Geothermal Development						
				Natural Sources						
6	S	LITTLE ALKALI LAKE	603.100	Arsenic		Medium	1	Acres	0198	0199
				Naturally impaired (by geologic/geothermal sources); natural impairment to be documented as "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.						
				Natural Sources						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May 99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	S	MONO LAKE	601.000	Salinity/TDS/Chlorides		High	35000	Acres	0198	0199
				Naturally saline, internally drained lake with increased TDS due to diversions of tributaries by Los Angeles Dept. of Water and Power. Natural high levels of toxic elements to be addressed through "easy" (already funded) TMDL using Section 104/106 grant funds.						
				Flow Regulation/Modification						
				Natural Sources						
				Source Unknown						
6	S	OWENS LAKE	603.300	Salinity/TDS/Chlorides		Low	20000	Acres		
				Natural internally drained saline lake with lake level decreased, salinity increased due to diversions of tributaries by Los Angeles Department of Water and Power. Pending project by Great Basin Unified Air Pollution Control District may restore some beneficial uses to part of lakebed. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, as resources permit. [20,000 acre area figure reflects past Corps of Engineers delineation of brine pool; natural lake bed is much larger.]						
				Flow Regulation/Modification						
				Natural Sources						
6	S	SEARLES LAKE	621.000	Salinity/TDS/Chlorides		Medium	26100	Acres	0198	0199
				Naturally saline, internally drained desert playa lake. Natural impairment to be documented as "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.						
				Source Unknown						
6	W	AMEDEE HOT SPRINGS	637.200	Metals		Medium	1	Acres	0198	0199
				Natural geothermal springs developed for energy production; natural impairment to be documented as "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.						
				Natural Sources						
6	W	BIG SPRINGS	603.100	Arsenic		Medium	1	Acres	0198	0199
				Natural geothermal source of arsenic at headwaters of Owens River. Natural impairment to be documented as "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.						
				Natural Sources						
6	W	CINDER CONE SPRINGS	635.000	Nutrients		Medium	1	Acres		
				Springs tributary to Truckee River, affected by subsurface drainage from former wastewater disposal area (disposal discontinued 1978).						
				Source Unknown						
				Salinity/TDS/Chlorides		Medium	1	Acres		
				Subsurface drainage from former wastewater disposal area. Has not been monitored routinely in recent years; further monitoring may support delisting. TMDLs, if needed, to be addressed during years 3-5 of the next 13 years of the TMDL development process, as resources permit.						
				Wastewater						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	W	FALES HOT SPRINGS	631.000	Metals		Medium	1	Acres	0198	0199
				Natural geothermal springs; natural impairment to be documented as "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.						
				Natural Sources						
6	W	HONEY LAKE AREA WETLANDS	637.200	Metals		Medium	12000	Acres		
				Geothermal drainage; effects of saline Honey Lake water. To be addressed during years 6-13 of the next 13 years of the TMDL development process, probably as part of TMDLs for Honey Lake and Susan River.						
				Agriculture						
				Geothermal Development						
				Natural Sources						
				Nonpoint Source						
6	W	KEOUGH HOT SPRINGS	603.000	Metals		Medium	1	Acres	0198	0199
				Natural geothermal springs developed for recreation. Natural impairment to be documented as "easy" (already funding) TMDL using 1998 Section 104/106 grant funds.						
				Natural Sources						
6	W	TOP SPRING	637.200	Radiation		Medium	1	Acres	0198	0199
				Natural source (spring was developed as domestic water source for USFS ranger station and abandoned after testing showed MCL exceedance.) Natural impairment to be documented as "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.						
				Natural Sources						
6	W	WENDEL HOT SPRINGS	637.200	Metals		Medium	1	Acres	0198	0199
				Natural geothermal spring developed for energy. Metals source to be documented as natural for "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.						
				Natural Sources						
7	R	ALAMO RIVER	723.100	Pesticides		High	52	Miles	2002	2011
				Pesticides may be contained in agricultural return flows. Elevated fish tissue levels. Toxic bioassay results.						
				Agricultural Return Flows						
				Sedimentation/Siltation		High	52	Miles	1998	2000
				Agricultural Return Flows						
				Selenium		High	52	Miles	2000	2010
				Selenium originates from Upper Basin Portion of Colorado River. Elevated fish tissue levels.						
				Agricultural Return Flows						
7	R	COACHELLA VALLEY STORM CHANNEL	719.470	Bacteria		Low	20	Miles	2004	2009
				Bacteria objectives violated, threat of toxic bioassay results.						
				Source Unknown						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
7	R	IMPERIAL VALLEY DRAINS	723.100	Pesticides		High	1305	Miles	2005	2011
				<i>Elevated fish tissue levels and toxic bioassay results.</i>						
				Agricultural Return Flows						
				Sedimentation/Siltation		High	1305	Miles	2000	2010
				<i>Agricultural return flows.</i>						
				Agricultural Return Flows						
				Selenium		High	1305	Miles	2000	2010
				<i>Selenium originates from Upper Basin Portion of Colorado River. Elevated fish tissue levels.</i>						
				Agricultural Return Flows						
7	R	NEW RIVER (R7)	723.100	Bacteria		High	60	Miles	1998	2005
				<i>Regional Board proposes to establish TMDL in cooperation with U.S.EPA/Mexico.</i>						
				Agricultural Return Flows						
				Nutrients		High	60	Miles	2002	2010
				<i>Regional Board proposes to establish TMDL in cooperation with U.S.EPA/Mexico.</i>						
				Agricultural Return Flows						
				Pesticides		High	60	Miles	2002	2013
				<i>Agricultural Return Flows</i>						
				Sedimentation/Siltation		High	60	Miles	1998	2002
				<i>Agricultural Drainage from Imperial Valley and Mexicali Valley.</i>						
				Agricultural Return Flows						
				Volatile Organics/VOCs		High	60	Miles	2007	2013
				<i>Agricultural Return Flows</i>						
7	R	PALO VERDE OUTFALL DRAIN	715.400	Bacteria		Medium	16	Miles	2005	2011
				<i>Source Unknown</i>						
7	S	SALTON SEA	728.000	Nutrients		Medium	220000	Acres	2002	2010
				<i>Agricultural Return Flows</i>						
				Salinity		Medium	220000	Acres	1998	2001
				<i>Agricultural Return Flows</i>						
				Selenium		Medium	220000	Acres	2000	2007
				<i>Selenium originates from Upper Basin Portion of Colorado River.</i>						
				Agricultural Return Flows						
8	B	ANAHEIM BAY	801.110	Metals		Medium	180	Acres	0108	0111
				<i>Unknown Nonpoint Source</i>						
				<i>Urban Runoff/Storm Sewers</i>						
				Pesticides		Medium	180	Acres	0108	0111
				<i>Unknown Nonpoint Source</i>						

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
8	B	HUNTINGTON HARBOUR	801.110	Metals	Boatyards Urban Runoff/Storm Sewers	Medium	150	Acres	0108	0111
				Pathogens	Urban Runoff/Storm Sewers	Medium	150	Acres	0108	0111
				Pesticides	Unknown Nonpoint Source	Medium	150	Acres	0108	0111
8	B	NEWPORT BAY, LOWER	801.110	Metals	Boatyards Contaminated Sediments Urban Runoff/Storm Sewers	High	700	Acres	0196	0107
				Nutrients	Agriculture Urban Runoff/Storm Sewers	High	700	Acres	0196	0198
				Pathogens	Urban Runoff/Storm Sewers	High	700	Acres	0697	0100
				Pesticides	Agriculture Contaminated Sediments	High	700	Acres	0199	0102
				Priority Organics	Contaminated Sediments Unknown Nonpoint Source	High	700	Acres	0199	0102
8	E	UPPER NEWPORT BAY ECOLOGICAL RESERVE	801.110	Metals	Urban Runoff/Storm Sewers	High	752	Acres	0199	0102
				Nutrients	Agriculture Groundwater Loadings Urban Runoff/Storm Sewers	High	752	Acres	0196	0198
				Pathogens	Urban Runoff/Storm Sewers	High	752	Acres	0697	0100
				Pesticides	Agriculture Unknown Nonpoint Source	High	752	Acres	0199	0102
				Sedimentation/Siltation	Agriculture Channel Erosion Construction/Land Development Erosion/Siltation	High	752	Acres	0196	0198

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May 99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
8	L	BIG BEAR LAKE	801.710	Copper	Resource Extraction	Medium	2970	Acres	0102	0105
				Mercury	Resource Extraction	Medium	2970	Acres	0102	0105
				Metals	Resource Extraction	Medium	2970	Acres	0102	0105
				Noxious aquatic plants	Construction/Land Development Unknown point source	Medium	2970	Acres	0102	0105
				Nutrients	Construction/Land Development Snow Skiing Activities	Medium	2970	Acres	0102	0105
				Sedimentation/Siltation	Construction/Land Development Snow Skiing Activities Unknown Nonpoint Source	Medium	2970	Acres	0102	0105
8	L	CANYON LAKE (RAILROAD CANYON RESERVOIR)	802.120	Nutrients	Nonpoint Source	Medium	600	Acres	0102	0104
				Pathogens	Nonpoint Source	Medium	600	Acres	0102	0104
8	L	ELSINORE, LAKE	802.310	Nutrients	Unknown Nonpoint Source	Medium	3300	Acres	0102	0104
				Org. enrichment/Low D.O.	Unknown Nonpoint Source	Medium	3300	Acres	0102	0104
				Sedimentation/Siltation	Urban Runoff/Storm Sewers	Medium	3300	Acres	0102	0104
				Unknown Toxicity	Unknown Nonpoint Source	Medium	3300	Acres	0102	0104
8	L	FULMOR, LAKE	802.210	Pathogens	Unknown Nonpoint Source	Low	9	Acres	0108	0111
8	L	PRADO PARK LAKE	801.210	Nutrients	Nonpoint Source	Low	60	Acres	0108	0111
				Pathogens	Nonpoint Source	Low	60	Acres	0108	0111

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
8	R	CHINO CREEK, REACH 1	801.210	Nutrients	Agriculture Dairies	Medium	2	Miles	0100	0105
				Pathogens	Dairies Urban Runoff/Storm Sewers	Medium	2	Miles	0100	0105
8	R	CHINO CREEK, REACH 2	801.210	High Coliform Count	Unknown Nonpoint Source	Low	10	Miles	0108	0111
8	R	CUCAMONGA CREEK, VALLEY REACH	801.210	High Coliform Count	Unknown Nonpoint Source	Low	13	Miles	0108	0111
8	R	GROUT CREEK	801.720	Metals	Unknown Nonpoint Source	Medium	2	Miles	0102	0105
				Nutrients	Unknown Nonpoint Source	Medium	2	Miles	0102	0105
8	R	KNICKERBOCKER CREEK	801.710	Metals	Unknown Nonpoint Source	Medium	2	Miles	0103	0105
				Pathogens	Unknown Nonpoint Source	Medium	2	Miles	0103	0105
8	R	LYTLE CREEK	801.400	Pathogens	Unknown Nonpoint Source	Low	18	Miles	0108	0111
8	R	MILL CREEK (PRADO AREA)	801.250	Nutrients	Agriculture Dairies	Medium	4	Miles	0100	0105
				Pathogens	Dairies	Medium	4	Miles	0100	0105
				Suspended solids	Dairies	Medium	4	Miles	0100	0105
8	R	MILL CREEK, REACH 1	801.580	Pathogens	Unknown Nonpoint Source	Low	5	Miles	0108	0111
8	R	MILL CREEK, REACH 2	801.580	Pathogens	Unknown Nonpoint Source	Low	8	Miles	0108	0111

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12 May 99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
8	R	MOUNTAIN HOME CREEK	801.580	Pathogens	Unknown Nonpoint Source	Low	4	Miles	0108	0111
8	R	MOUNTAIN HOME CREEK, EAST FORK	801.700	Pathogens	Unknown Nonpoint Source	Low	1	Miles	0108	0111
8	R	RATHBONE (RATHBUN) CREEK	801.720	Nutrients	Snow Skiing Activities Unknown Nonpoint Source	Medium	2	Miles	0102	0105
				Sedimentation/Siltation	Snow Skiing Activities Unknown Nonpoint Source	Medium	2	Miles	0102	0105
8	R	SAN DIEGO CREEK, REACH 1	801.110	Metals	Unknown Nonpoint Source	High	6	Miles	0199	0102
				Nutrients	Agriculture Groundwater Loadings Urban Runoff/Storm Sewers	High	6	Miles	0196	0198
				Pesticides	Unknown Nonpoint Source	High	6	Miles	0199	0102
				Sedimentation/Siltation	Agriculture Channel Erosion Construction/Land Development Erosion/Siltation	High	6	Miles	0196	0198
8	R	SAN DIEGO CREEK, REACH 2	801.110	Metals	Urban Runoff/Storm Sewers	High	6	Miles	0199	0102
				Nutrients	Agriculture Groundwater Loadings Urban Runoff/Storm Sewers	High	6	Miles	0196	0198
				Sedimentation/Siltation	Agriculture Channel Erosion Construction/Land Development Erosion/Siltation	High	6	Miles	0196	0198
				Unknown Toxicity	Unknown Nonpoint Source	High	6	Miles	0199	0102

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

Appendix -121

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
8	R	SANTA ANA RIVER, REACH 3	801.200	Nutrients		Medium	3	Miles	0100	0111
				Pathogens	Dairies	Medium	3	Miles	0100	0111
				Salinity/TDS/Chlorides	Dairies	Medium	3	Miles	0100	0111
8	R	SANTA ANA RIVER, REACH 4	801.270	Pathogens		Low	12	Miles	0108	0111
					Nonpoint Source					
8	R	SANTIAGO CREEK, REACH 4	801.120	Salinity/TDS/Chlorides		Low	2	Miles	0108	0111
					Source Unknown					
8	R	SILVERADO CREEK	801.120	Pathogens		Low	2	Miles	0108	0111
				Salinity/TDS/Chlorides	Unknown Nonpoint Source	Low	2	Miles	0108	0111
					Unknown Nonpoint Source					
8	R	SUMMIT CREEK	801.710	Nutrients		Medium	2	Miles	0102	0105
					Construction/Land Development					
9	B	MISSION BAY	906.400	Eutrophic		Medium	1	Acres	0705	0708
				High Coliform Count	Nonpoint/Point Source	Low	1540	Acres	0799	0709
				Lead	Nonpoint/Point Source	Medium	1	Acres	0705	0708
					Nonpoint/Point Source					
9	B	SAN DIEGO BAY	900.00	Benthic Comm. Effects		High	172	Acres	0198	0703
					The listing covers the following areas: Near Sub Base 16 acres, Near Grape Street 7 acres, Downtown Piers 10 acres, Near Coronado Bridge 30 acres, Near Chollas Creek 14 acres, San Diego Naval Station 76 acres, Seventh Street Channel 9 acres, North of 24th Street Marine Terminal 10 acres.					
					Nonpoint/Point Source					
				Copper		High	50	Acres	0198	0703
					This listing is for dissolved copper in the Shelter Island yacht Basin in San Diego Bay.					
					Nonpoint/Point Source					
				Sediment Toxicity		High	172	Acres	0198	0703
					The listing covers the following areas: Near Sub Base 16 acres, Near Grape Street 7 acres, Downtown Piers 10 acres, Near Coronado Bridge 30 acres, Near Chollas Creek 14 acres, San Diego Naval Station 76 acres, Seventh Street Channel 9 acres, North of 24th Street Marine Terminal 10 acres.					
					Nonpoint/Point Source					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 18 May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
9	C	PACIFIC OCEAN, ALISO HSA	901.13	High Coliform Count	Nonpoint/Point Source	Medium	0.01	Miles	0797	0701
9	C	PACIFIC OCEAN, BUENA VISTA HA	904.20	High Coliform Count	Nonpoint/Point Source	Low	0.02	Miles	0799	0709
9	C	PACIFIC OCEAN, CORONADO HA	910.10	High Coliform Count	Nonpoint/Point Source	Low	0.04	Miles	0799	0709
9	C	PACIFIC OCEAN, DANA POINT HSA	901.14	High Coliform Count	Nonpoint/Point Source	Low	0.06	Miles	0700	0710
9	C	PACIFIC OCEAN, ESCONDIDO CREEK HA	904.60	High Coliform Count	Nonpoint/Point Source	Low	0.02	Miles	0799	0709
9	C	PACIFIC OCEAN, LAGUNA BEACH HSA	901.12	High Coliform Count	Nonpoint/Point Source	Low	0.15	Miles	0700	0710
9	C	PACIFIC OCEAN, LOMA ALTA HSA	904.10	High Coliform Count	Nonpoint/Point Source	Low	1	Miles	0799	0709
9	C	PACIFIC OCEAN, LOWER SAN JUAN HSA	901.270	High Coliform Count	Nonpoint/Point Source	Low	0.02	Miles	0700	0710
9	C	PACIFIC OCEAN, SAN CLEMENTE HA	901.30	High Coliform Count	Nonpoint/Point Source	Low	0.15	Miles	0700	0710
9	C	PACIFIC OCEAN, SAN DIEGO HU	907.00	High Coliform Count	Nonpoint/Point Source	Low	0.5	Miles	0799	0709

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

Appendix -123

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
9	C	PACIFIC OCEAN, SAN DIEGUITO HU 905.00	905.00	High Coliform Count	Nonpoint/Point Source	Low	0.02	Miles	0799	0709
9	C	PACIFIC OCEAN, SAN LUIS REY HU 903.00	903.00	High Coliform Count	Nonpoint/Point Source	Low	0.01	Miles	0799	0709
9	C	PACIFIC OCEAN, SAN MARCOS HA 904.50	904.50	High Coliform Count	Nonpoint/Point Source	Low	0.01	Miles	0799	0709
9	C	PACIFIC OCEAN, SCRIPPS HA 906.30	906.30	High Coliform Count	Nonpoint/Point Source	Low	0.13	Miles	0799	0709
9	C	PACIFIC OCEAN, TIJUANA HU 911.00	911.00	High Coliform Count	Nonpoint/Point Source	Low	3.2	Miles	0798	0711
9	C	SAN DIEGO BAY, LINDBERGH HSA 908.21	908.21	High Coliform Count	Nonpoint/Point Source	Low	0.2	Miles	0799	0709
9	C	SAN DIEGO BAY, TELEGRAPH HSA 909.11	909.11	High Coliform Count	Nonpoint/Point Source	Low	0.01	Miles	0799	0709
9	E	AGUA HEDIONDA LAGOON	904.310	High Coliform Count	Nonpoint/Point Source	Low	5	Acres	0799	0709
				Sedimentation/Siltation	Nonpoint/Point Source	Medium	5	Acres	0704	0707
9	E	ALISO CREEK MOUTH OF ORANGE	901.130	High Coliform Count	Nonpoint/Point Source	Medium	0.3	Acres	0797	0701
9	E	BUENA VISTA LAGOON	904.210	High Coliform Count	Nonpoint/Point Source	Low	350	Acres	0799	0709
				Nutrients	Nonpoint/Point Source	Low	150	Acres	0704	0707

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
9	E	FAMOSA SLOUGH & CHANNEL	906.400	Sedimentation/Siltation	Nonpoint/Point Source	Medium	350	Acres	0704	0707
				Eutrophic	Nonpoint Source	Medium	28	Acres	0705	0708
9	E	LOMA ALTA SLOUGH	904.100	Eutrophic	Nonpoint Source	Low	8	Acres	0799	0709
				High Coliform Count	Nonpoint Source	Low	8	Acres	0799	0709
				Sedimentation/Siltation	Nonpoint/Point Source	Medium	385	Acres	0705	0708
				Eutrophic	Nonpoint/Point Source	Low	330	Acres	0799	0709
9	E	SAN ELIJO LAGOON	904.610	High Coliform Count	Nonpoint/Point Source	Low	150	Acres	0799	0709
				Sedimentation/Siltation	Nonpoint/Point Source	Medium	150	Acres	0704	0707
				High Coliform Count	Nonpoint/Point Source	Low	2	Acres	0700	0710
				Eutrophic	Nonpoint/Point Source	High	1	Acres	0796	0705
9	E	SAN JUAN CREEK (MOUTH)	901.200	High Coliform Count	Nonpoint/Point Source	Low	1	Acres	0798	0711
				Eutrophic	Nonpoint/Point Source	Low	150	Acres	0798	0711
9	E	SANTA MARGARITA LAGOON	902.110	High Coliform Count	Nonpoint/Point Source	Low	1	Acres	0798	0711
				Lead	Nonpoint/Point Source	Low	1	Acres	0798	0711
				Nickel	Nonpoint/Point Source	Low	1	Acres	0798	0711
				Pesticides	Nonpoint/Point Source	Low	1	Acres	0798	0711
				Thallium	Nonpoint/Point Source	Low	1	Acres	0798	0711
				Trash	Nonpoint/Point Source	Low	1	Acres	0798	0711
				High Coliform Count	Nonpoint/Point Source	Low	150	Acres	0798	0711
				Lead	Nonpoint/Point Source	Low	1	Acres	0798	0711
				Nickel	Nonpoint/Point Source	Low	1	Acres	0798	0711
9	E	TIJUANA RIVER ESTUARY	911.110	Pesticides	Nonpoint/Point Source	Low	1	Acres	0798	0711
				Thallium	Nonpoint/Point Source	Low	1	Acres	0798	0711
				Trash	Nonpoint/Point Source	Low	1	Acres	0798	0711
				High Coliform Count	Nonpoint/Point Source	Low	150	Acres	0798	0711
				Lead	Nonpoint/Point Source	Low	1	Acres	0798	0711
				Nickel	Nonpoint/Point Source	Low	1	Acres	0798	0711
				Pesticides	Nonpoint/Point Source	Low	1	Acres	0798	0711
				Thallium	Nonpoint/Point Source	Low	1	Acres	0798	0711
				Trash	Nonpoint/Point Source	Low	1	Acres	0798	0711

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

Appendix -125.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
9	L	GUAJOME LAKE	903.110	Eutrophic		Medium	25	Acres	0708	0711
					Nonpoint/Point Source					
9	R	ALISO CREEK	901.130	High Coliform Count		Medium	1	Miles	0797	0701
					Nonpoint/Point Source					
9	R	CHOLLAS CREEK	908.220	Cadmium		High	1	Miles	0198	0703
				Elevated levels in Stormwater.						
					Nonpoint/Point Source					
				Copper		High	1	Miles	0198	0703
				Elevated levels in Stormwater.						
					Nonpoint/Point Source					
				High Coliform Count		Low	1	Miles	0799	0709
					Nonpoint/Point Source					
				Lead		High	1	Miles	0198	0703
				Elevated levels in Stormwater.						
					Nonpoint/Point Source					
				Toxicity		High	1	Miles	0198	0703
				Toxicity in Stormwater.						
					Nonpoint/Point Source					
				Zinc		High	1	Miles	0198	0703
				Elevated levels in Stormwater.						
					Nonpoint/Point Source					
9	R	RAINBOW CREEK	902.200	Eutrophic		High	5	Miles	0798	0700
					Nonpoint/Point Source					
9	R	SAN JUAN CREEK LOWER	901.270	High Coliform Count		Low	1	Miles	0700	0710
					Nonpoint/Point Source					
9	R	TECOLOTE CREEK	906.500	Cadmium		Medium	6	Miles	0705	0708
				Elevated levels in Stormwater.						
					Nonpoint/Point Source					
				Copper		Medium	6	Miles	0705	0708
				Elevated levels in Stormwater.						
					Nonpoint/Point Source					
				High Coliform Count		Low	6	Miles	0799	0709
					Nonpoint/Point Source					
				Lead		Medium	6	Miles	0705	0708
				Elevated levels in Stormwater.						
					Nonpoint/Point Source					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
9	R	TIJUANA RIVER	911.110	Toxicity		Medium	6	Miles	0705	0708
				Elevated levels in Stormwater.						
					Nonpoint/Point Source					
				Zinc		Medium	6	Miles	0705	0708
				Elevated levels in Stormwater.						
					Nonpoint/Point Source					
				Eutrophic		Low	7	Miles	0798	0711
					Nonpoint/Point Source					
				High Coliform Count		Low	7	Miles	0798	0711
					Nonpoint/Point Source					
				Org. enrichment/Low D.O.		Low	7	Miles	0798	0711
					Nonpoint/Point Source					
				Pesticides		Low	7	Miles	0798	0711
					Nonpoint/Point Source					
				Solids		Low	7	Miles	0798	0711
					Nonpoint/Point Source					
				Synthetic Organics		Low	7	Miles	0798	0711
					Nonpoint/Point Source					
				Trace Elements		Low	7	Miles	0798	0711
					Nonpoint/Point Source					
				Trash		Low	7	Miles	0798	0711
					Nonpoint/Point Source					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
--------	------	------	---------------	---------------------	--------	----------	------------------	------	---------------	-------------

ABBREVIATIONS

REGIONAL WATER QUALITY CONTROL BOARDS

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

WATER BODY TYPE

- | | | |
|------------------------|-------------------------|--------------------------|
| B = BAYS AND HARBORS | L = LAKES / RESERVOIRS | S = SALINE LAKES |
| C = COASTAL SHORELINES | O = OCEAN AND OPEN BAYS | T = WETLANDS, TIDAL |
| E = ESTUARIES | R = RIVERS / STREAMS | W = WETLANDS, FRESHWATER |
| G = GROUND WATER | | |

HYDRO UNIT

"Hydro Unit" is the State Water Resources Control Board hydrological subunit area.

START AND END DATES

Start and End Dates are shown as the year or as month/year.

GROUP A or *CHEM A* PESTICIDES

aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, hexachlorocyclohexane (including lindane), endosulfan, and toxaphene

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

**STAFF REPORT
VOLUME II**

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

**WATER BODY FACT SHEETS SUPPORTING
THE SECTION 303(d) RECOMMENDATIONS**



JANUARY 2003

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

Page left blank intentionally.

STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER QUALITY

STAFF REPORT

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

WATER BODY FACT SHEETS SUPPORTING
THE SECTION 303(d) RECOMMENDATIONS

VOLUME II

DRAFT

January 2003
FINAL

This is a draft document that is subject to revision.

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

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

Water Body Fact Sheets Supporting the Section 303(d) Recommendations

Volume II

This Staff Report supporting the revision of the Clean Water Act Section 303(d) list of water quality limited segments has four parts: (1) Volume I contains the listing methodology and a summary of the proposed additions, deletions, changes, and priorities; (2) Volume II contains summaries of the proposals for the North Coast, San Francisco Bay, Central Coast, and Los Angeles Regional Water Quality Control Boards (RWQCBs); (3) Volume III contains summaries of the proposals for the Central Valley, Lahontan, Colorado River Basin, Santa Ana, and San Diego RWQCBs, and (4) Volume IV contains the responses to comments received. Each proposal is presented in a water body fact sheet.

This document is Volume II of the Staff Report. Proposed changes to the Section 303(d) list are included for the following RWQCBs:

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

Each RWQCB section in this volume is divided into the following parts:

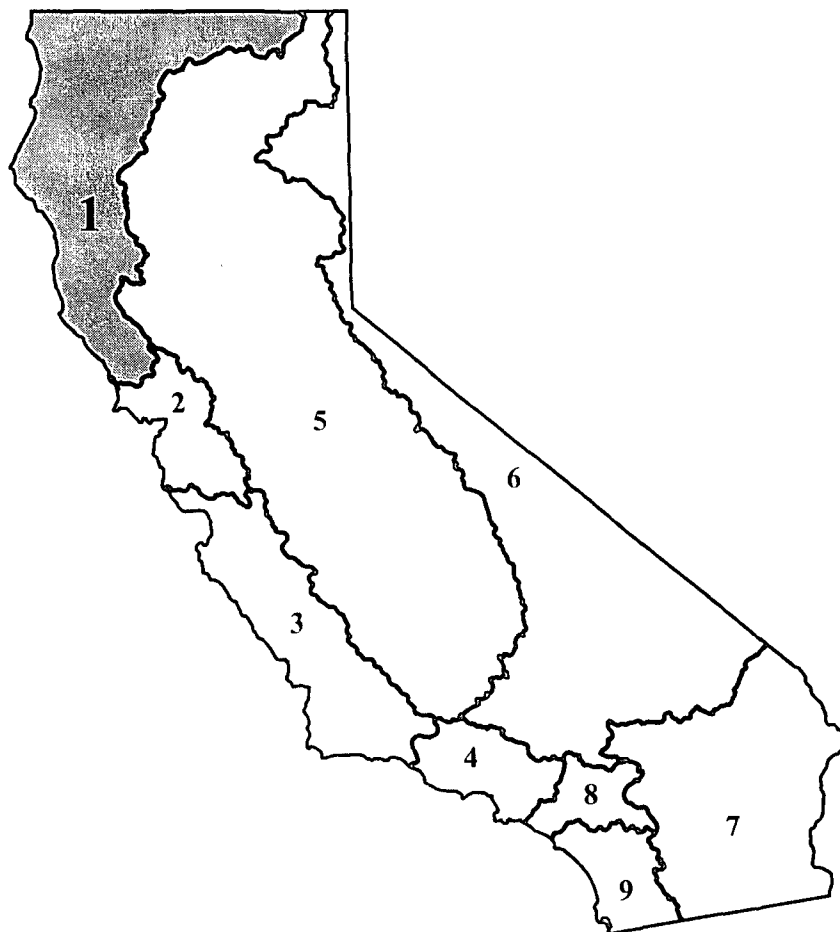
- Water Body Fact Sheets for each proposal
- Reference list of the data and information used

All data and information submitted after May 15, 2001 is included in the submittals presented in Volume IV.

Page left blank intentionally.

Regional Water Quality Control Board

NORTH COAST REGION (1)



SECTION 303 (d) LIST PROPOSALS

Page left blank intentionally.

Region 1: Albion River Sedimentation/Siltation

Water Body	Albion River
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Region 1: Big River Sedimentation/Siltation

Water Body	Big River
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Region 1: Big River

Temperature

Water Body	Big River
Stressor/Media/Beneficial Use	Temperature/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	MWAT linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality Objectives/Historic Temperature Ranges/Sullivan 2000 Published Temperature Thresholds-Peer Reviewed Literature.
Water Body-specific Information	Data = 4 years (96-2000), Data measured at site, Species or indicator present at Site, Environmental conditions considered at site.
Data used to assess water quality	Data show that 29 out of 34 locations exceed the criterion of Sullivan, 2000= 14.8 degrees. But 23 locations had MWAT values exceeded for sub-lethal effects (10 and 20% reduced growth). None of the sites exceeded the 24 degree lethal criteria. 19 locations MWAT values exceeded the MWAT criteria (17 degrees) for sub-lethal effects (10% reduced growth). MWAT values at 4 locations exceeded the available MWAT criteria for sub-lethal effects (20% reduced growth).
Spatial representation	34 Locations over the 200 sq. mile area in the Big River watershed.
Temporal representation	Data was collected over 4 years (96-2000), with at least two years of record at 15 locations.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Streambank modification/destabilization, Removal of riparian vegetation, Habitat modification, Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Watch List: Based on a letter sent from the NCRWQCB on January 31, 2002 the RWQCB feels there is insufficient information existing to list. The Maximum Weekly Average Temperature (MWAT) and the Maximum Weekly Maximum Temperature (MWMt) values for the Big River Watershed exceed the criteria values (Sullivan, 2000 Published Temperature Thresholds -Peer Reviewed Literature), that were used to translate the narrative Water Quality Objective for Region 1 for Temperature.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Region 1: Big River Temperature

This conclusion is based on the staff findings that:

1. The data exhibited sufficient spatial and temporal coverage.
2. Beneficial uses apply to the water body.
3. Water quality standard used is applicable.
4. The evaluation guideline used to interpret narrative water quality standards is adequate.
5. Data are numerical.
6. Other water body- or site-specific information including the effects of season and age of the data were considered.

Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 1: Garcia River Sedimentation/Siltation

Water Body	Garcia River
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region 1: Gualala River Temperature

Water Body	Gualala River
Stressor/Media/Beneficial Use	Temperature/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	Maximum Weekly Average Temperature (MWAT) linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality Objectives/Historic Temperature Ranges/Sullivan 2000 Published Temperature Thresholds- Peer Reviewed Literature.
Water Body-specific Information	Data = 6 Years (1994-2000), Data measured at site, Species or indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	MWAT values exceeded criteria for sub-lethal effects (10 to 20% reduced growth) in the watershed at all or most locations. Maximum temperatures in one year at 15 locations was higher than 24 Degrees = Lethal.
Spatial representation	62 Locations over the 300 square mile area in the Gualala River Watershed.
Temporal representation	Data collected over 6 Years, with at least two years at 27 locations.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Streambank modification/destabilization, Removal of riparian vegetation, Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Watch List: Based on a letter sent from the NCRWQCB on January 31, 2002 the RWQCB feels there is insufficient information existing to list. The Maximum Weekly Average Temperature (MWAT) and the Maximum Weekly Maximum Temperature (MWMT) values for the Gualala River Watershed exceed the criteria values (Sullivan, 2000 Published Temperature Thresholds -Peer Reviewed Literature), that were used to translate the narrative Water Quality Objective for Region 1 for Temperature.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data exhibited sufficient spatial and temporal coverage. 2. Beneficial uses apply to the water body. 3. Water quality standard used is applicable.

Region 1: Gualala River Temperature

4. The evaluation guideline used to interpret narrative water quality standards is adequate.
5. Data are numerical.
6. Other water body- or site-specific information including the effects of season and age of the data were considered.

Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 1: Gualala River Sedimentation/Siltation

Water Body	Gualala River
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Region 1: Jacoby Creek

Sediment

Water Body	Jacoby Creek
Stressor/Media/Beneficial Use	Sediment/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight and a QA Plan was submitted as a reference.
Linkage between measurement endpoint and beneficial use or standard	Turbidity linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality objectives for Sediment, settleable material and turbidity. Published Sedimentation Thresholds- Peer Reviewed Literature.
Water Body-specific Information	Data = 10 Years (1992-2002). Data measured at site, Species or indicator present at Site, Environmental conditions considered at site.
Data used to assess water quality	Turbidity levels throughout the watershed from 1992- 2002, are recorded at levels detrimental to salmonids. Up to 1.6 feet of aggradation from 1992 to 2002 based on cross section surveys.
Spatial representation	Targeted Sites, 10 along the creek.
Temporal representation	Data collected over 10 years in 1992- 2002.
Data type	Numerical Data.
Use of standard method	Protocol/QAPP developed by Salmon Forever using EPA and USGS standard methods.
Potential Source(s) of Pollutant	Silviculture, Road construction, Land development, Nonpoint source, Natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>Most of the water quality measurements exceeded the water quality</p>

Region 1: Jacoby Creek Sediment

standard. The staff confidence that standards were exceeded is high. Based on the review of available information the Beneficial Uses of Jacoby Creek are impacted due to sedimentation. The data have exceeded the criteria (Published Sedimentation Thresholds-Peer Reviewed Literature), used to translate the narrative Basin Plan Water Quality Objectives for sediment.

Region 1: Laguna de Santa Rosa Sediment

Water Body	Laguna de Santa Rosa
Stressor/Media/Beneficial Use	Sediment/Water/Cold Freshwater Habitat; Spawning, Reproduction, and/or Early Development; Rare, Threatened, or Endangered Species.
Data quality assessment. Extent to which data quality requirements met.	
Linkage between measurement endpoint and beneficial use or standard	
Utility of measure for judging if standards or uses are not attained	
Water Body-specific Information	The Russian River watershed was listed for Sedimentation/Siltation in 1998. This listing applies to Santa Rosa Creek. Estimated TMDL Completion Date is 2011.
Data used to assess water quality	
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Maintain listing.
SWRCB Staff Recommendation	Maintain listing.

Region 1: Laguna de Santa Rosa

Temperature

Water Body	Laguna de Santa Rosa
Stressor/Media/Beneficial Use	Temperature/Water/Cold Freshwater Habitat; Spawning, Reproduction, and/or Early Development; Rare, Threatened, or Endangered Species
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	MWAT linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality Objectives/Historic Temperature Ranges/Sullivan 2000 Published Temperature Thresholds- Peer Reviewed Literature.
Water Body-specific Information	Data = 5 years (1997-2001), Data measured at site, Species or indicator present at site , Environmental conditions considered at site.
Data used to assess water quality	All 26 locations had MWAT values exceeding the (Sullivan 2000) criteria of 14.8 and 17 Degrees, used to translate the narrative WQO for temperature.
Spatial representation	26 Site locations in the Russian River Watershed.
Temporal representation	More than one season for 5 years.
Data type	Numerical data.
Use of standard method	
Potential Source(s) of Pollutant	Flow regulation/modification, Removal of riparian vegetation, Habitat Modification, Nonpoint Sources.
Alternative Enforceable Program	
RWQCB Recommendation	Based on a letter sent from the NCRWQCB on January 31, 2002 the RWQCB feels there is sufficient information and recommends to list the Russian River watershed. This listing includes the Laguna de Santa Rosa. The Maximum Weekly Average Temperature (MWAT) and the Maximum Weekly Maximum Temperature (MWMT) values for the Russian River Watershed exceed the criteria values (Sullivan, 2000 Published Temperature Thresholds- Peer Reviewed Literature) that were used to translate the narrative Water Quality Objective for Region 1 for Temperature.
SWRCB Staff Recommendation	Based on a letter sent from the NCRWQCB on January 31, 2002 the SWQCB feels there is sufficient information and recommends to list the Russian River watershed. This listing includes the Laguna de Santa Rosa. The Maximum Weekly Average Temperature (MWAT) and the Maximum Weekly Maximum Temperature (MWMT) values for the Russian River Watershed exceed the criteria values (Sullivan, 2000 Published Temperature Thresholds- Peer Reviewed Literature) that were used to translate the narrative Water Quality Objective for Region 1 for Temperature.

Region 1: Laguna de Santa Rosa

Nutrients

Water Body	Laguna de Santa Rosa
Stressor/Media/Beneficial Use	Nutrients/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	Nitrogen and Phosphorus linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	The RWQCB initially used a USEPA goal for phosphorus to interpret the data. The use of the phosphorus goal does not address the conditions present in the Laguna de Santa Rosa. There is significant disagreement over phosphorus limitation in the Laguna. The response of water bodies to nutrient enrichment differ among water bodies and one applicable nutrient objective is not available. USEPA and the state are in the process of developing nutrient objectives for the bioregions of California.
Water Body-specific Information	Data = 5-6 Years (1995-2001), Data measured at site, Species or indicator present at Site, Environmental conditions considered at site.
Data used to assess water quality	Even though there are 10 water chemistry samples, there is no applicable guideline that can be used to interpret the narrative standard. Even though a phosphorus goal is not applicable in this specific situation, it is clear that the Laguna de Santa Rosa does not meet standards for low dissolved oxygen. It is also clear that nutrient concentrations are a probable cause of the low oxygen concentrations. New monitoring should be completed that identifies the contribution of nutrients and their relationship to the observed low oxygen concentrations.
Spatial representation	Targeted Sites, 10 along the creek.
Temporal representation	Data collected over 4 seasons.
Data type	Numerical data.
Use of standard method	USEPA Standards, and Standard Methods for examination of Wastewater and Water.
Potential Source(s) of Pollutant	Point source, Nonpoint source, Internal nutrient cycling.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List. The Desired Goal used to determine the nutrients listing, does not take into consideration the nutrient cycling or site-specific conditions taking place in the Laguna de Santa Rosa. Placement on the Monitoring List will allow the RWQCB to better define and understand which pollutant contributes to or causes the low dissolved oxygen in the Laguna de Santa Rosa. Stakeholders have committed to work in cooperation with the RWQCB to develop a TMDL.

Region 1: Laguna de Santa Rosa

Nutrients

analysis for dissolved oxygen that will provide a better understanding of nutrients and their influence in the Laguna de Santa Rosa. Nutrients will be addressed in the development of the Dissolved Oxygen TMDL. This stakeholder process should be transparent and inclusive of all participants.

Region 1: Laguna de Santa Rosa

Diazinon

Water Body Laguna de Santa Rosa

Stressor/Media/Beneficial Use Diazinon

Data quality assessment. Extent to which data quality requirements met.

Linkage between measurement endpoint and beneficial use or standard

Utility of measure for judging if standards or uses are not attained

Water Body-specific Information

Data used to assess water quality

In November, 1999 results from the City of Santa Rosa were non-detect for all pesticides, including diazinon. As presented in the RWQCB November 16, 2002 303(d) List Update Recommendations report, a 1997 Department of Pesticides Regulations study reported that two of the fifty two samples from the Russian River above the reporting limit, at concentrations above that believed to be detrimental to freshwater organisms. The RWQCB recommends placing the Russian River watershed on the Watch List for diazinon, but not specifying individual tributaries.

Spatial representation

Temporal representation

Data type

Use of standard method

Potential Source(s) of Pollutant

Alternative Enforceable Program

RWQCB Recommendation

Exclude the Laguna de Santa Rosa from Listing for diazinon.

SWRCB Staff Recommendation

After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be excluded from Listing.

This conclusion is based on the staff findings that only two of the water quality measurements exceeded the applicable water quality criteria. The RWQCB recommends placing the Russian River watershed on the Watch List for diazinon, but not specifying individual tributaries.

Region 1: Laguna de Santa Rosa

Chromium, Copper, and Zinc

Water Body	Laguna de Santa Rosa
Stressor/Media/Beneficial Use	Chromium, Copper, and Zinc
Data quality assessment. Extent to which data quality requirements met.	
Linkage between measurement endpoint and beneficial use or standard	
Utility of measure for judging if standards or uses are not attained	
Water Body-specific Information	
Data used to assess water quality	Available copper, chromium, and zinc water quality and sediment data, including additional (new) data has submitted by the City of Santa Rosa collected from Santa Rosa Creek and Laguna de Santa Rosa. Comparison of these data to applicable criteria (maximum contaminant level, an agricultural criterion, public health goals, aquatic life criterion, and California Toxic Rule criteria) shows that all available data are below applicable criteria. The RWQCBs previous assessment did not include comparison to CTR. The City of Santa Rosa continues to monitor both Santa Rosa Creek and the Laguna de Santa Rosa for these metals, and the RWQCB will continue to review the results when available.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Exclude from Listing.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be excluded from Listing.</p> <p>This conclusion is based on the staff findings that none of the water quality measurements exceeded the applicable water quality criteria.</p>

Region 1: Laguna de Santa Rosa

Low Dissolved Oxygen

Water Body	Laguna de Santa Rosa
Stressor/Media/Beneficial Use	Low Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	WQO, RWQCB's Basin Plan Objective for Dissolved Oxygen.
Water Body-specific Information	Data = 5-6 Years (1995-2001), Data measured at site, Species or indicator present at Site, Environmental conditions considered at site.
Data used to assess water quality	Water Chemistry Total Samples n=1792, with 1612 below the 7.0 mg/L Objective.
Spatial representation	Data collected at 4 attainment points along the water body.
Temporal representation	Data collected over 4 seasons.
Data type	Numerical data.
Use of standard method	City of Santa Rosa Monitoring, North Coast RWQCB monitoring.
Potential Source(s) of Pollutant	Nonpoint source, Point Source, Internal nutrient cycling.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- or site-specific information including the age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p> <p>A TMDL was completed for dissolved oxygen in 1995, but recent data</p>

Region 1: Laguna de Santa Rosa

Low Dissolved Oxygen

show that water quality objectives are not yet being met, and additional measures need to be taken to address this problem. Recently, the City of Santa Rosa in cooperation with the RWQCB has committed to fund a study to develop a TMDL analysis for dissolved oxygen that will be used to set waste load and load allocations for the Laguna de Santa Rosa.

Region 1: Lake Mendocino

Mercury

Water Body	Lake Mendocino
Stressor/Media/Beneficial Use	Mercury/Water/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight. TSMP QAPP was used.
Linkage between measurement endpoint and beneficial use or standard	Mercury is linked to Fish Consumption.
Utility of measure for judging if standards or uses are not attained	U.S. EPA Tissue Residue Criterion.
Water Body-specific Information	Data = 3 years (1999 - 2001), Data measured at site, species present in the water body, environmental conditions considered at site.
Data used to assess water quality	The 1999 data show that all three of the fish samples exceed the U.S. EPA tissue residue criterion. The preliminary data from 2001 show that six of the ten samples exceed the U.S. EPA tissue residue criterion. These intensive monitoring studies of fish tissue mercury levels in Lake Mendocino in cooperation with the Office of Environmental Health and Hazard Assessment show that the mercury levels in Lake Mendocino exceed the U.S. EPA tissue residue criterion.
Spatial representation	Data were collected spatially within Lake Mendocino.
Temporal representation	Data were collected during May in the 1999 study and during September in the 2000 study.
Data type	Numerical data.
Use of standard method	RWQCB methods.
Potential Source(s) of Pollutant	Resource Extraction, Non-point Source
Alternative Enforceable Program	
RWQCB Recommendation	Monitoring List
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used.

Region 1: Lake Mendocino

Mercury

Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 1: Lake Sonoma

Mercury

Water Body	Lake Sonoma
Stressor/Media/Beneficial Use	Mercury/Water/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight. TSMP QAPP was used.
Linkage between measurement endpoint and beneficial use or standard	Mercury is linked to Fish Consumption.
Utility of measure for judging if standards or uses are not attained	U.S. EPA Tissue Residue Criterion.
Water Body-specific Information	Data = 3 years (1999 - 2001), Data measured at site, species present in the water body, environmental conditions considered at site.
Data used to assess water quality	The 1999 data show that all six of the fish samples exceed the U.S. EPA tissue residue criterion. The preliminary data from 2001 show that seven of the twelve samples exceed the U.S. EPA tissue residue criterion. These intensive monitoring studies of fish tissue mercury levels in Lake Sonoma in cooperation with the Office of Environmental Health and Hazard Assessment show that the mercury levels in Lake Sonoma exceed the U.S. EPA tissue residue criterion.
Spatial representation	Data were collected spatially within Lake Sonoma.
Temporal representation	Data were collected during May in the 1999 study and during September in the 2001 study.
Data type	Numerical data.
Use of standard method	RWQCB methods.
Potential Source(s) of Pollutant	Resource Extraction, Non-point Source
Alternative Enforceable Program	
RWQCB Recommendation	Monitoring List
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used.

Region 1: Lake Sonoma

Mercury

Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 1: Mad River Temperature

Water Body	Mad River
Stressor/Media/Beneficial Use	Temperature/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	MWAT linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality Objectives/Historic Temperature Ranges/Sullivan 2000 Published Temperature Thresholds- Peer Reviewed Literature.
Water Body-specific Information	Data = 4 years (97-2001), Data measured at site, Species or indicator present at Site, Environmental conditions considered at site.
Data used to assess water quality	MWAT values at all 11 locations exceeded 20 degrees and are higher than the criteria for sub-lethal effects (10 to 20% reduced growth). Maximum temperatures at most of the 11 locations were higher than 24 Degrees (= Lethal) in most years.
Spatial representation	Targeted 11 sites along the 503 sq. miles of the creek.
Temporal representation	Data collected over 4 years. Data was available from 11 locations, with at least 2 years of record at most locations.
Data type	Numerical data.
Use of standard method	Monitoring was conducted as part of the permitting process from 1997-2000).
Potential Source(s) of Pollutant	Flow regulation/modification, Removal of riparian vegetation, Habitat modification, Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Watch List: Based on a letter sent from the NCRWQCB on January 31, 2002 the RWQCB feels there is insufficient information existing to list. The Maximum Weekly Average Temperature (MWAT) and the Maximum Weekly Maximum Temperature (MWMT) values for the Mad River Watershed exceed the criteria values (Sullivan, 2000 Published Temperature Thresholds -Peer Reviewed Literature), that were used to translate the narrative Water Quality Objective for Region 1 for Temperature.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data exhibited sufficient spatial and temporal coverage.

Region 1: Mad River

Temperature

2. Beneficial uses apply to the water body.
3. Water quality standard used is applicable.
4. The evaluation guideline used to interpret narrative water quality standards is adequate.
5. Data are numerical.
6. Other water body- or site-specific information including the effects of season and age of the data were considered.

Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 1: Mattole River Sedimentation

Water Body	Mattole River
Stressor/Media/Beneficial Use	Sedimentation and Temperature/Water/Cold Freshwater Habitat; Spawning, Reproduction, and/or Early Development; Rare, Threatened, or Endangered Species.
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC plan were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	In-stream sediment indicators linked to salmonid requirements. Temperature thresholds (MWAT) linked to salmonid sensitive life-stage requirements.
Utility of measure for judging if standards or uses are not attained	Basin Plan water quality objectives for sediment, settleable solids, and turbidity; published sediment thresholds from peer reviewed literature, aerial photo interpretation. Basin Plan water quality objective for temperature; Sullivan, et al 2000 published temperature thresholds, stream temperature modeling.
Water Body-specific Information	Analysis of 1941 to 2000 aerial photo sets. 2002 road and stream survey data. 1994-2001 stream temperature data. Riparian vegetation conditions throughout entire watershed. Thermal infrared survey of entire mainstem and six large tributaries. Water temperature data collected every 1-1.5 hours throughout summer.
Data used to assess water quality	Stream substrate parameters. Channel morphology responsive/vulnerable to increased flows and input of upslope sediment. Water temperature data collected every 1-1.5 hours throughout summer.
Spatial representation	Targeted 40 road and stream surveys; 44 square miles of aerial photo analysis, complete representation of current and potential stream shade conditions, thermal infrared survey of entire mainstem and six large tributaries; well distributed stream temperature monitoring.
Temporal representation	Aerial photo data collected represents a 60 year period, stream temperature data collected over seven years.
Data type	Numeric data, aerial photo analysis, measured instream parameters, remotely gathered thermal infrared and vegetation coverages.
Use of standard method	Forest Science Project stream temperature data collection protocol, WA State Watershed Analysis Manual.
Potential Source(s) of Pollutant	Road construction, Timber harvest activity, Livestock grazing-riparian/upland, and Natural sources, Silviculture, Logging Road Construction.
Alternative Enforceable Program	None.
RWQCB Recommendation	Maintain Listing.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the

Region 1: Mattole River Sedimentation

water body should not be removed from the section 303(d) list because applicable water quality standards are still exceeded and a pollutant contributes to or causes the problem. Maintain Listing. Original Listing Date: 1993. Estimated TMDL Completion Date: 1/06.

Region 1: Navarro River

Temperature

Water Body	Navarro River
Stressor/Media/Beneficial Use	Temperature/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Region 1: Noyo River Sedimentation/Siltation

Water Body	Noyo River
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Region 1: Redwood Creek

Sedimentation

Water Body	Redwood Creek
Stressor/Media/Beneficial Use	Sedimentation/Water/Cold Freshwater Habitat; Spawning, Reproduction, and/or Early Development; Rare, Threatened, or Endangered Species.
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC plan were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	In-stream sediment indicators linked to salmonid habitat requirements.
Utility of measure for judging if standards or uses are not attained	Basin Plan water quality objectives for sediment, settleable solids, and turbidity; published sediment thresholds from peer reviewed literature.
Water Body-specific Information	1975-1995: particle size distribution data; 1977-1999: channel morphology data; 1973-2000 suspended sediment data; 1999 turbidity data; 2002 road inventory data.
Data used to assess water quality	Fine sediment loads exceed TMDL thresholds, particularly in the lower watershed. Channel morphology responsive/ vulnerable to increased flows and input of upslope sediment. Suspended sediment loads do not consistently meet TMDL threshold. Road densities throughout basin exceed densities protective of water quality. 15% of roads have been decommissioned, and 6% have been upgraded.
Spatial representation	Targeted 4 to 15 sites (depending on variable) throughout 282 square mile watershed.
Temporal representation	Data collected over 25 year period.
Data type	Numerical data.
Use of standard method	USGS sampling. Peer-reviewed monitoring/sampling techniques.
Potential Source(s) of Pollutant	Harvest-related erosion, Road-related surface erosion, gullies, Road crossing failures, Natural landslides, Logging road construction, Natural sources, Erosion/Siltation.
Alternative Enforceable Program	None.
RWQCB Recommendation	Maintain Listing.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be removed from the section 303(d) list because applicable water quality standards are still exceeded and a pollutant contributes to or causes the problem. Original Listing Date: 1993. Estimated TMDL Completion Date: 7/07.

Region 1: Redwood Creek Temperature

Water Body	Redwood Creek
Stressor/Media/Beneficial Use	Temperature/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	MWAT linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality Objectives/Historic Temperature Ranges/Sullivan 2000 Published Temperature Thresholds- Peer Reviewed Literature.
Water Body-specific Information	Data = 7 years (94-2001), Data measured at site, Species or indicator present at Site, Environmental conditions considered at site.
Data used to assess water quality	MWAT values at 23 of the 31 locations exceeded criteria (Sullivan 2000) for 14.8 degrees C. 10 locations exceeded the criteria sub-lethal effects (10% reduced growth) 17 degrees C. 5 locations in the estuary, 3 locations in the mainstem, and 1 on Lacks Creek exceeded the criteria available for (20% reduced growth) sub-lethal effects. Maximum temperatures at 6 locations were higher than 24 Degrees Celsius (= Lethal).
Spatial representation	Targeted sites 31 locations over the 294 sq. miles of the creek.
Temporal representation	Data was collected over 7 years (94-2001); with at least two years of record at 20 locations.
Data type	Numerical data.
Use of standard method	USGS sampling.
Potential Source(s) of Pollutant	Landslides in the Redwood Creek Watershed/Floods/Erosion of decommissioned roads, Removal of Riparian Vegetation, Streambank Modification/Destabilization, Erosion/Siltation, Nonpoint Sources.
Alternative Enforceable Program	
RWQCB Recommendation	Watch List: Based on a letter sent from the NCRWQCB on January 31, 2002 the RWQCB feels there is insufficient information existing to list. The Maximum Weekly Average Temperature (MWAT) and the Maximum Weekly Maximum Temperature (MWMT) values for the Ten Mile River Watershed exceed the criteria values (Sullivan, 2000 Published Temperature Thresholds-Peer Reviewed Literature), that were used to translate the narrative Water Quality Objective for Region 1 for Temperature.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Region 1: Redwood Creek

Temperature

This conclusion is based on the staff findings that:

1. The data exhibited sufficient spatial and temporal coverage.
2. *Beneficial uses apply to the water body.*
3. Water quality standard used is applicable.
4. The evaluation guideline used to interpret narrative water quality standards is adequate.
5. Data are numerical.
6. Other water body- or site-specific information including the effects of season and age of the data were considered.

Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 1: Russian River Temperature

Water Body	Russian River
Stressor/Media/Beneficial Use	Temperature/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	MWAT linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality Objectives/Historic Temperature Ranges/Sullivan 2000 Published Temperature Thresholds- Peer Reviewed Literature.
Water Body-specific Information	Data = 5 years (1997-2001), Data measured at site, Species or indicator present at site , Environmental conditions considered at site.
Data used to assess water quality	All 26 locations had MWAT values exceeding the (Sullivan 2000) criteria of 14.8 and 17 Degrees, used to translate the narrative WQO for temperature.
Spatial representation	26 Site locations in the Russian River Watershed.
Temporal representation	More than one season for 5 years.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Flow regulation/modification, Removal of riparian vegetation, Habitat Modification, Nonpoint Sources.
Alternative Enforceable Program	
RWQCB Recommendation	Based on a letter sent from the NCRWQCB on January 31, 2002 the RWQCB feels there is sufficient information and recommends to list this water body. The Maximum Weekly Average Temperature (MWAT) and the Maximum Weekly Maximum Temperature (MWMT) values for the Russian River Watershed exceed the criteria values (Sullivan, 2000 Published Temperature Thresholds- Peer Reviewed Literature) that were used to translate the narrative Water Quality Objective for Region 1 for Temperature.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data exhibited sufficient spatial and temporal coverage. 2. Beneficial uses apply to the water body. 3. Water quality standard used is applicable. 4. The evaluation guideline used to interpret narrative water quality

Region 1: Russian River Temperature

standards is adequate.

5. Data are numerical.

6. Other water body- or site-specific information including the age of the data were considered.

All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 1: Russian River Pathogens

Water Body	Russian River
Stressor/Media/Beneficial Use	Pathogens/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	Pathogens/Bacteria (i.e. Fecal coliform) to REC-1 Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality Objectives.
Water Body-specific Information	Data = 15 Years (1987-2001), Data measured at site, Species or indicator present at site, Environmental conditions considered at sites.
Data used to assess water quality	Bacterial Data : 72% of the fecal coliform data from 1986-1994 at Healdsburg Memorial Beach exceed the WQO. 75% of the fecal coliform data from 1992-1994 at Monte Rio beach exceed the WQO.
Spatial representation	Healdsburg Memorial Beach and Monte Rio Beach areas, sample sites unknown.
Temporal representation	All of the Samples were collected in the summer months.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Point sources, Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. Data has shown these water bodies have exceeded the WQO for pathogens. List the Monte Rio area from the confluence of Dutch Bill Creek to the confluence of Fife Creek. Also list Healdsburg Memorial Beach from the Highway 101 crossing to the railroad crossing upstream of the beach.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data exhibited sufficient spatial and temporal coverage. 2. Beneficial uses apply to the water body. 3. Water quality standard used is applicable. 4. The evaluation guideline used to interpret narrative water quality standards is adequate. 5. Data are numerical. 6. Other water body- or site-specific information including the age of the data were considered.

Region 1: Russian River Pathogens

Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 1: Santa Rosa Creek Sediment

Water Body	Santa Rosa Creek
Stressor/Media/Beneficial Use	Sediment/Water/Cold Freshwater Habitat; Spawning, Reproduction, and/or Early Development; Rare, Threatened, or Endangered Species.
Data quality assessment. Extent to which data quality requirements met.	
Linkage between measurement endpoint and beneficial use or standard	
Utility of measure for judging if standards or uses are not attained	
Water Body-specific Information	The Russian River watershed was listed for Sedimentation/Siltation in 1998. This listing applies to Santa Rosa Creek. Estimated TMDL Completion Date is 2011.
Data used to assess water quality	
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Maintain Listing
SWRCB Staff Recommendation	Maintain Listing

Region 1: Santa Rosa Creek

Temperature

Water Body	Santa Rosa Creek
Stressor/Media/Beneficial Use	Temperature/Water/Cold Freshwater Habitat; Spawning, Reproduction, and/or Early Development; Rare, Threatened, or Endangered Species.
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	MWAT linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality Objectives/Historic Temperature Ranges/Sullivan 2000 Published Temperature Thresholds- Peer Reviewed Literature.
Water Body-specific Information	Data = 5 years (1997-2001), Data measured at site, Species or indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	All 26 locations had MWAT values exceeding the (Sullivan 2000) criteria of 14.8 and 17 Degrees, used to translate the narrative WQO for temperature.
Spatial representation	26 Site locations in the Russian River Watershed.
Temporal representation	More than one season for 5 years.
Data type	Numerical data.
Use of standard method	
Potential Source(s) of Pollutant	Flow regulation/modification, Removal of riparian vegetation, Habitat Modification, Nonpoint Sources.
Alternative Enforceable Program	
RWQCB Recommendation	Based on a letter sent from the NCRWQCB on January 31, 2002 the RWQCB feels there is sufficient information and recommends to list the Russian River watershed. This listing includes Santa Rosa Creek. The Maximum Weekly Average Temperature (MWAT) and the Maximum Weekly Maximum Temperature (MWMT) values for the Russian River Watershed exceed the criteria values (Sullivan, 2000 Published Temperature Thresholds- Peer Reviewed Literature) that were used to translate the narrative Water Quality Objective for Region 1 for Temperature.
SWRCB Staff Recommendation	Based on a letter sent from the NCRWQCB on January 31, 2002, there is sufficient information and recommends to list the Russian River watershed. This listing includes Santa Rosa Creek. The Maximum Weekly Average Temperature (MWAT) and the Maximum Weekly Maximum Temperature (MWMT) values for the Russian River Watershed exceed the criteria values (Sullivan, 2000 Published Temperature Thresholds- Peer Reviewed Literature) that were used to translate the narrative Water Quality Objective for Region 1 for Temperature.

Region 1: Santa Rosa Creek

Pathogens

Water Body	Santa Rosa Creek
Stressor/Media/Beneficial Use	Pathogens/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	Pathogens/Bacteria (i.e. E. coli.) linked to REC-1 Beneficial Use.
Utility of measure for judging if standards or uses are not attained	CA. Draft DHS Guidance for Freshwater Beaches, Swimming Advisory Posting.
Water Body-specific Information	Data = 1-23 Years (1979/1980 and 2001), Data measured at site, Species or indicator present at Site, Environmental conditions considered at site.
Data used to assess water quality	Bacterial Data n=38, 19 exceeding draft DHS Guidance standards NOT enough data to show exceedance of REC-1 WQO -Bacteria, but enough to show exceedance of the DHS guidance. The DHS guidance for fresh water beaches, which was used to post a swimming advisory for this water body.
Spatial representation	Targeted Sites, 12 along the creek.
Temporal representation	Data collected over 12 days in June/July 2001 and also during 4 separate months in 1979/1980.
Data type	Numerical data.
Use of standard method	City of Santa Rosa and Draft CA. State DHS Guidance for Fresh Water Beaches.
Potential Source(s) of Pollutant	Point sources and Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data exhibited sufficient spatial and temporal coverage. 2. The evaluation guideline used is adequate. A Swimming Advisory for this waterbody is in effect, based on the use of this Draft CA. DHS Guidance for Fresh Water Beaches, impacting the Beneficial Use. There was not enough data to show exceedances of REC-1, WQO- Bacteria. 3. Data are numerical. 4. Standard methods were used. 5. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the DHS guidance. The staff confidence that standards were exceeded in high.</p>

Region 1: Santa Rosa Creek Chromium, Copper, and Zinc

Water Body Santa Rosa Creek

Stressor/Media/Beneficial Use Chromium, Copper, and Zinc

Data quality assessment. Extent to which data quality requirements met.

Linkage between measurement endpoint and beneficial use or standard

Utility of measure for judging if standards or uses are not attained

Water Body-specific Information

Data used to assess water quality

Available copper, chromium, and zinc water quality and sediment data, including additional (new) data has submitted by the City of Santa Rosa collected from Santa Rosa Creek and Laguna de Santa Rosa. Comparison of these data to applicable criteria (maximum contaminant level, an agricultural criterion, public health goals, aquatic life criterion, and California Toxic Rule criteria) shows that all available data are below applicable criteria. The RWQCBs previous assessment did not include comparison to CTR. The City of Santa Rosa continues to monitor both Santa Rosa Creek and the Laguna de Santa Rosa for these metals, and the RWQCB will continue to review the results when available.

Spatial representation

Temporal representation

Data type

Use of standard method

Potential Source(s) of Pollutant

Alternative Enforceable Program

RWQCB Recommendation

Exclude from Listing.

SWRCB Staff Recommendation

After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be excluded from Listing.

This conclusion is based on the staff findings that none of the water quality measurements exceeded the applicable water quality criteria.

Region 1: Santa Rosa Creek

Diazinon

Water Body Santa Rosa Creek

Stressor/Media/Beneficial Use Diazinon

Data quality assessment. Extent to which data quality requirements met.

Linkage between measurement endpoint and beneficial use or standard

Utility of measure for judging if standards or uses are not attained

Water Body-specific Information

Data used to assess water quality

In November of 1999 results by the City of Santa Rosa were non-detect for all pesticides, including diazinon. Presented in the RWQCB November 16, 2002 303(d) List Update Recommendations report, a 1997 Department of Pesticides Regulations study reported that two of the fifty two samples from the Russian River above the reporting limit, at concentrations above that believed to be detrimental to freshwater organisms. The RWQCB recommends placing the Russian River watershed on the Watch List for diazinon, but not specifying individual tributaries.

Spatial representation

Temporal representation

Data type

Use of standard method

Potential Source(s) of Pollutant

Alternative Enforceable Program

RWQCB Recommendation

Exclude from Listing.

SWRCB Staff Recommendation

After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be excluded from Listing.

This conclusion is based on the staff findings that none of the water quality measurements exceeded the applicable water quality criteria. The RWQCB recommends placing the Russian River watershed on the Watch List for diazinon, but not specifying individual tributaries.

The tributaries of the Russian River should not be placed on the Monitoring List. The Russian River should be on the Monitoring List for diazinon.

Region 1: South Fork Eel River

Temperature

Water Body	South Fork Eel River
Stressor/Media/Beneficial Use	Temperature/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Region 1: South Fork Eel River

Sedimentation/Siltation

Water Body	South Fork Eel River
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Region 1: South Fork Trinity River/Hayfork Creek

Sedimentation/Siltation

Water Body	South Fork Trinity River/Hayfork Creek
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Region 1: Stemple Creek/Estero de San Antonio

Sediment

Water Body	Stemple Creek/Estero de San Antonio
Stressor/Media/Beneficial Use	Sediment/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	Turbidity linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality objectives for sediment. Published Sedimentation Thresholds- Peer Reviewed Literature.
Water Body-specific Information	Data = 5 Years (1996-2001), Data measured at site, Species or indicator present at Site, Environmental conditions considered at site.
Data used to assess water quality	Have a narrative Objective for Sediment and Turbidity, Have data from 5 years for turbidity measurements. The data have exceeded the criteria (Published Sedimentation Thresholds- Peer Reviewed Literature). used to translate the narrative Basin Plan Water Quality Objectives for Sediment.
Spatial representation	Targeted stations, 3 sites along creek
Temporal representation	Data collected over 5 sampling years.
Data type	Numerical data.
Use of standard method	Dept. Fish and Game.
Potential Source(s) of Pollutant	Soil Erosion, Nonpoint Source.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data exhibited sufficient, insufficient spatial and temporal coverage. 2. The evaluation guideline used to interpret narrative water quality standards is adequate. 3. Data are numerical. 4. Standard methods were used. 5. Other water body- or site-specific information including the effects of season and age of the data were considered. <p>A TMDL was approved in 1997 for this Watershed and "sediment" was inadvertently not included as a stressor in the original 303(d) List, it should have been included. All the elements for sediment are addressed in the 1997 TMDL, but sediment was not listed as a stressor, nutrients were.</p>

Region 1: Stemple Creek/Estero de San Antonio

Sediment

RWQCB wants to amend the 303(d) list to include sediment so that the TMDL can be completed. The data have exceeded the criteria (Published Sedimentation Thresholds- Peer Reviewed Literature) used to translate the narrative Basin Plan Water Quality Objectives for sediment.

Region 1: Ten Mile River Sedimentation/Siltation

Water Body	Ten Mile River
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Region 1: Ten Mile River

Temperature

Water Body	Ten Mile River
Stressor/Media/Beneficial Use	Temperature/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	MWAT linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality Objectives/Historic Temperature Ranges/Sullivan 2000 Published Temperature Thresholds-Peer Reviewed Literature.
Water Body-specific Information	Data = 7 years (93-2000), Data measured at site, Species or indicator present at Site, Environmental conditions considered at site.
Data used to assess water quality	Maximum recorded temperatures did not exceed 24 degrees at any of the locations. 31 out of the 37 locations exceeded the 14.8 criteria (Sullivan 2000). MWAT values at 17 locations exceeded the 17 degree MWAT criteria for sub-lethal effects (10% reduced growth) MWAT values at 3 of the locations exceeded the MWAT criteria for sub-lethal (20% reduced growth).
Spatial representation	Data were available from 37 locations.
Temporal representation	2 years of data were available for all of the 37 locations with the exception of 3 of them. 5 years of data were available from 26 locations.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Streambank modification/destabilization, Removal of riparian vegetation, Habitat modification, Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Watch List: Based on a letter sent from the NCRWQCB on January 31, 2002 the RWQCB feels there is insufficient information existing to list. The Maximum Weekly Average Temperature (MWAT) and the Maximum Weekly Maximum Temperature (MWMT) values for the Ten Mile River Watershed exceed the criteria values (Sullivan, 2000 Published Temperature Thresholds -Peer Reviewed Literature), that were used to translate the narrative Water Quality Objective for Region 1 for Temperature.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. This conclusion is based on the staff findings that:

Region 1: Ten Mile River

Temperature

1. The data exhibited sufficient spatial and temporal coverage.
2. Beneficial uses apply to the water body.
3. Water quality standard used is applicable.
4. The evaluation guideline used to interpret narrative water quality standards is adequate.
5. Data are numerical.
6. Other water body- or site-specific information including the effects of season and age of the data were considered.

Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 1: Trinity River Sedimentation/Siltation

Water Body	Trinity River
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Region 1: Tule Lake and the Lower Klamath National Wildlife Refuge

pH

Water Body	Tule Lake and the Lower Klamath National Wildlife Refuge
Stressor/Media/Beneficial Use	pH/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	pH linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality Objectives.
Water Body-specific Information	Data = 6 years (1992-1997), Data measured at site, Species or indicator present at Site, Environmental conditions considered at site.
Data used to assess water quality	For the Klamath Straights Data showed in 1996, 10 pH exceedances out of 15 measurements (7.9- 10 range), 1997 data showed 13 pH exceedances out of 15 measurements (8.1 - 10 Range). The 1992-95 data showed 3 exceedances out of 11 samples (4.6- 9.12 range). For the Tule Lake Data showed in 1996 10 pH exceedances out of 15 measurements (7.5 - 10.0 range). 1997 data showed 13 exceedances out of 15 measurements and the 1992-95 the data showed 7 exceedances out of 11 samples (range 5 - 10.2).
Spatial representation	Klamath Straights-sampling station/Tule Lake-Pump D sampling station.
Temporal representation	April through October Data from 1992-1997 for Klamath and Tule Lake.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Nonpoint sources, Internal nutrient cycling.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data exhibited sufficient spatial and temporal coverage. 2. Beneficial uses have been established. 3. Water quality standard used is applicable. 4. Data are numerical. 5. Standard methods were used. 6. Other water body- or site-specific information including the effects of season and age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. Data has shown that the pH values exceeded the WQO for pH.</p>

Region 1: Tule Lake and the Lower Klamath National Wildlife Refuge

pH

The staff confidence that standards were exceeded is high. List for pH for the portions of Tule Lake and Lower Klamath Lake National Wildlife Refuge.

Region 1: Van Duzen River/Yager Creek

Sedimentation/Siltation

Water Body	Van Duzen River/Yager Creek
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Water Bodies Proposed for the Monitoring List in Region 1

Water Body	Pollutant/Stressor	Rationale
Alder Creek	Sediment and Temperature	<p>Data regarding instream conditions and sediment impact are not available in this watershed. Temperature data for Alder Creek provided by a recent survey (Pjerrou, 2001) indicate that high temperature levels may be a source of impairment of cold water fisheries in Alder Creek. Additional information on the temporal and spatial extent of elevated temperatures, including MWATs, are required to determine the extent of stream temperature impairment.</p> <p>Staff recommends conducting additional instream sediment and temperature assessments of Alder Creek to determine whether spawning and rearing habitat of cold water fisheries and other beneficial uses are impaired due to sedimentation and/or elevated temperatures.</p>
Bcith Creek	Sediment	<p>Beneficial uses of concern include those associated with cold water fisheries (commercial and sport fishing, spawning, reproduction, and/or early development). Chief threats are sedimentation and increased runoff, and possibly urban runoff (Farhi, 2001). Based on the available information, it is difficult to determine whether the instream sediment conditions are impairing the cold water fishery. Additional information on instream sediment conditions, channel aggradation, and historic and current fish presence/absence is necessary to determine whether water quality objectives are being exceeded and beneficial uses impaired.</p>
Brush Creek	Sediment	<p>Data suggests low impact by fine sediments on the streambed. However, further information regarding instream sediment conditions is necessary to verify the transport capacity for Brush Creek and evaluate the conditions of the other southern Mendocino Coast streams.</p> <p>Staff recommends conducting additional instream sediment assessments in these southern Mendocino Coast streams to determine whether spawning and rearing habitat of cold water fisheries and other beneficial uses are impaired due to sediments.</p>
Casper Creek	Pathogens	<p>There is not enough data over a 30-day time period to make a determination of water quality objective exceedance for contact recreation, according to Basin Plan water quality objectives. While the results may be due to a residual effect of the sewer line break, the lack of baseline data makes it difficult to determine with any certainty. Given the anecdotal accounts of surfers getting sinusitis/ear infections, staff recommends putting Virgin Creek, Casper Creek, and Pudding Creek on the watch list and conducting baseline monitoring for pathogens to assess whether beneficial uses are threatened or impaired.</p>
Cottaneva Creek	Sediment	<p>Information regarding sediment loading, instream conditions, and sediment transport capacity of these streams is insufficient to determine whether beneficial uses are impaired. Staff recommends conducting instream sediment and temperature assessments of these northern Mendocino Coast streams to determine whether beneficial uses are impaired due to sediments.</p>

Water Body	Pollutant/Stressor	Rationale
Dehaven Creek		
	Sediment	Fish population data and timber harvest histories were not available for these watersheds. However, both these streams have been documented to provide historic habitat for coho salmon which are currently absent from the watersheds (Pjerrou, 2001). Due to lack of fish population data, it is difficult to determine whether the instream sediment conditions have impaired the cold water fishery and other beneficial uses. Staff recommends additional research to characterize historic fisheries conditions, as well as obtaining more information on harvest histories and instream conditions necessary for making a beneficial use impairment determination.
East Fork Trinity River		
	Mercury	An assessment of water quality around abandoned mine sites in Trinity County revealed that water quality standards are being met, except at the site of the Altoona mercury mine at the northern end of Trinity County above the East Fork of the Trinity River (Trinity Journal, 2001). A USGS monitoring program, to be completed in 2002, will evaluate the impact of abandoned mines such as the Altoona mine on federal lands in the Trinity River watershed. Staff recommends assessing the results of the study when available to determine whether beneficial uses are impaired by mercury.
Elk Creek		
	Sediment	<p>Data suggests low impact by fine sediments on the streambed. However, further information regarding instream sediment conditions is necessary to verify the transport capacity for Elk Creek and evaluate the conditions of the other southern Mendocino Coast streams.</p> <p>Staff recommends conducting additional instream sediment assessments in these southern Mendocino Coast streams to determine whether spawning and rearing habitat of cold water fisheries and other beneficial uses are impaired due to sediments.</p>
Greenwood Creek		
	Sediment and Temperature	The most sensitive beneficial uses supported by Greenwood Creek include uses associated with the cold water fishery and municipal and domestic supply. There is conflicting evidence regarding the impairment of Greenwood Creek's instream conditions due to fine sediment. The results of all of these studies are mixed, and seem to indicate, at a minimum, the existence of localized degradation of streambed quality due to fine sediments. At this time, staff is unable to determine the contributing factors causing the impairment to the domestic water supply. It is unclear, based upon the available information, whether upstream timber harvest practices contributed to the bank erosion. Furthermore, temperature data from two locations on Greenwood Creek spanning six years of record from 1992 to 2000 indicate that high temperature levels may be a source of impairment of cold water fisheries in Greenwood Creek. Based on the complicated circumstances regarding the drinking water supply, as well as the mixed information on the instream sediment conditions in Greenwood Creek, staff recommends putting Greenwood Creek on the Monitoring List for sediment. Staff also recommends that Greenwood Creek be added to the Monitoring List for temperature, and that additional temperature monitoring at more locations throughout the watershed be conducted to evaluate possible temperature impairment of the cold water fishery.
Grotzman Creek		
	Sediment	Beneficial uses of concern include those associated with cold water fisheries (commercial and sport fishing, spawning, reproduction, and/or early development). Chief threats are sedimentation and increased runoff, and possibly urban runoff (Farhi, 2001). Based on the available information, it is difficult to determine whether the instream sediment conditions are impairing the cold water fishery. Additional information on instream sediment conditions, channel aggradation, and historic and current fish presence/absence is necessary to determine whether water quality objectives are being exceeded and beneficial uses impaired.

Water Body	Pollutant/Stressor	Rationale
Hardy Creek	Sediment	Information regarding sediment loading, instream conditions, and sediment transport capacity of these streams is insufficient to determine whether beneficial uses are impaired. Staff recommends conducting instream sediment and temperature assessments of these northern Mendocino Coast streams to determine whether beneficial uses are impaired due to sediments.
Howard Creek	Sediment	Information regarding sediment loading, instream conditions, and sediment transport capacity of these streams is insufficient to determine whether beneficial uses are impaired. Staff recommends conducting instream sediment and temperature assessments of these northern Mendocino Coast streams to determine whether beneficial uses are impaired due to sediments.
Humboldt Bay	PCBs and Dieldrin	Preliminary 1999-2000 data (SWRCB, 2001) from the State Mussel Watch Program (SMWP) shows levels of dieldrin and Total PCBs in transplanted California Mussels that exceed maximum tissue residue levels for enclosed bays and estuaries (Humboldt Del Norte Pier, C Street, and J Street). Given that the SMWP results are considered preliminary, and the lack of supporting information, staff recommends conducting additional monitoring at these sites for Total PCBs and dieldrin through the State Mussel Watch Program. Additional study may be conducted through the Surface Water Ambient Monitoring Program.
	Sediment	<p>According to accounts submitted for the 303(d) List update, sedimentation from streams which drain into the Bay, such as Jacoby Creek, has led to aggradation near the mouths of these creeks (Friedrichsen, 2001). Further, elevated turbidity and suspended solids can result in decreased light penetration through the water column, impacting aquatic plants such as eelgrass and the organisms dependent on them.</p> <p>It is not clear based on the available information whether water quality objectives are being exceeded and beneficial uses impaired in Humboldt Bay. Staff recommends additional study to determine whether beneficial uses are threatened due to sedimentation in Humboldt Bay.</p>
Juan Creek	Sediment	Information regarding sediment loading, instream conditions, and sediment transport capacity of these streams is insufficient to determine whether beneficial uses are impaired. Staff recommends conducting instream sediment and temperature assessments of these northern Mendocino Coast streams to determine whether beneficial uses are impaired due to sediments.
Klamath River	Sediment	Beneficial uses may be impaired in portions of the mainstem Klamath (particularly in the lower Klamath River) and tributaries to the Klamath River (Beaver Creek and tributaries to the Klamath below the confluence with the Trinity River have been specifically identified) due to excessive sediment loading and instream sediment conditions. Insufficient information is available at this time to make a listing determination. Staff recommends focused study of the instream sediment conditions to assess beneficial use impairment of the mainstem and tributaries.
Laguna de Santa Rosa	Nutrients	Even though there are 10 water chemistry samples, there is no applicable guideline that can be used to interpret the narrative standard. Even though a phosphorus goal is not applicable in this specific situation, it is clear that the Laguna de Santa Rosa does not meet standards for low dissolved oxygen. It is also clear that nutrient concentrations are a probable cause of the low oxygen concentrations. New monitoring should be completed that identifies the contribution of nutrients and their relationship to the observed low oxygen concentrations.

Water Body	Pollutant/Stressor	Rationale
Mad River Slough	PCBs	Preliminary 1999-2000 data (SWRCB, 2001) from the State Mussel Watch Program (SMWP) shows levels of Total PCBs in transplanted California Mussels sampled at the mouth of Mad River Slough that exceed maximum tissue residue levels for enclosed bays and estuaries. Given that the SMWP results are considered preliminary and there is little supporting information, staff recommends conducting additional monitoring of Mad River Slough for Total PCBs through the State Mussel Watch Program. Additional study may be conducted through the Surface Water Ambient Monitoring Program.
Mallo Pass Creek	Sediment	<p>Data suggests low impact by fine sediments on the streambed. However, further information regarding instream sediment conditions is necessary to verify the transport capacity for Mallo Pass Creek and evaluate the conditions of the other southern Mendocino Coast streams.</p> <p>Staff recommends conducting additional instream sediment assessments in these southern Mendocino Coast streams to determine whether spawning and rearing habitat of cold water fisheries and other beneficial uses are impaired due to sediments.</p>
Pudding Creek	Pathogens	There is not enough data over a 30-day time period to make a determination of water quality objective exceedance for contact recreation, according to Basin Plan water quality objectives. While the results may be due to a residual effect of the sewer line break, the lack of baseline data makes it difficult to determine with any certainty. Given the anecdotal accounts of surfers getting sinusitis/ear infections, staff recommends putting Virgin Creek, Casper Creek, and Pudding Creek on the watch list and conducting baseline monitoring for pathogens to assess whether beneficial uses are threatened or impaired.
Russian River	Diazinon	<p>In November of 1999 results by the City of Santa Rosa were non-detect for all pesticides, including diazinon. Presented in the RWQCB November 16, 2002 303(d) List Update Recommendations report, a 1997 Department of Pesticides Regulations study reported that two of the fifty two samples from the Russian River above the reporting limit, at concentrations above that believed to be detrimental to freshwater organisms. The RWQCB recommends placing the Russian River watershed on the Watch List for diazinon, but not specifying individual tributaries.</p> <p>The tributaries of the Russian River should not be placed on the Monitoring List. The Russian River should be on the Monitoring List for diazinon.</p>
Schooner Gulch	Sediment	<p>Data suggests low impact by fine sediments on the streambed. However, further information regarding instream sediment conditions is necessary to verify the transport capacity for Schooner Gulch and evaluate the conditions of the other southern Mendocino Coast streams.</p> <p>Staff recommends conducting additional instream sediment assessments in these southern Mendocino Coast streams to determine whether spawning and rearing habitat of cold water fisheries and other beneficial uses are impaired due to sediments.</p>
Shasta River	Sediment and Nutrients	Information on instream sediment and nutrient conditions available during the 303(d) List update process was insufficient to determine whether water quality objectives are being met and beneficial uses supported in the Shasta River. Staff recommends additional assessment of instream sediment conditions, to evaluate whether beneficial uses are currently impaired as a result of excessive sediment.

Water Body	Pollutant/Stressor	Rationale
Tule Lake and Lower Klamath Lake National Wildlife Refuge		
	Low Dissolved Oxygen and Unionized Ammonia	The available data are insufficient to support a listing for numeric objective exceedance. California does not have a standard for un-ionized ammonia. US EPA criteria were used for assessment of available data collected in 1996-1997. The US EPA criteria vary depending on temperature, pH and sensitive species present; the criteria become stricter as pH and temperature increase. Based on the information available during the 303(d) List update period, there are not sufficient data to list these surface waters for un-ionized ammonia. These surface waters should, however, be prioritized for additional un-ionized ammonia testing, including pH and water temperature. Additional work is suggested to evaluate the toxicity of un-ionized ammonia and the protection of the beneficial uses of these water bodies. In addition, the seasonal status of un-ionized ammonia concentrations should be examined.
Usal Creek		
	Sediment	The available data suggest that instream sediment conditions may contribute to a decline in the salmonid fishery. Staff recommends conducting additional instream monitoring and fish population surveys to determine whether spawning and rearing habitat of cold water fisheries and other beneficial uses are impaired due to sedimentation.
Virgin Creek		
	Pathogens	There is not enough data over a 30-day time period to make a determination of water quality objective exceedance for contact recreation, according to Basin Plan water quality objectives. While the results may be due to a residual effect of the sewer line break, the lack of baseline data makes it difficult to determine with any certainty. Given the anecdotal accounts of surfers getting sinusitis/ear infections, staff recommends putting Virgin Creek, Casper Creek, and Pudding Creek on the watch list and conducting baseline monitoring for pathogens to assess whether beneficial uses are threatened or impaired.
Wages Creek		
	Sediment	Fish population data and timber harvest histories were not available for these watersheds. However, both these streams have been documented to provide historic habitat for coho salmon which are currently absent from the watersheds (Pjerrou, 2001). Due to lack of fish population data, it is difficult to determine whether the instream sediment conditions in Dehaven and Wages Creeks have impaired the cold water fishery and other beneficial uses. Staff recommends additional research to characterize historic fisheries conditions, as well as obtaining more information on harvest histories and instream conditions necessary for making a beneficial use impairment determination.

Page left blank intentionally.

Reference List for Region 1

Staff Report

California Regional Water Quality Control Board. North Coast Region. 2001. 303(d) List Update Recommendations. November 16, 2001.

Contacts

Acker, Charles. Elk County Water District, 12/5/1997
Acker, Charles. Elk County Water District, 5/10/2001
Adelman, Brenda. Russian River Watershed Protection Committee, 5/15/2001
Alden, Henry. Gualala Redwoods, Inc., 9/26/2001
Ambrose, Jon. Georgia-Pacific Corporation, 12/11/1997
Bluc, Gerry. 5/10/2001
Boland, Margaret J. Department of Agriculture, 5/14/2001
Booth, Lyn. Environmental Health Department, 5/14/2001
Brauner, Ed. City of Santa Rosa, 10/8/2001
Brown, Jon C. Department of Parks and Mendocino, 2/20/2001
Brown, Margaret. private citizen, 12/10/1997
Brucker, Peter. Salmon River Restoration Council, 5/14/2001
Bush, Bernard. Redwood Creek Landowners Assoc., 10/8/2001
Cissne, John M. 4/13/2001
Conner, Kelly. Fruit Growers Supply Company, 5/15/2001
de Vall, Norman. Greenwood Watershed Association, 12/11/1997
Dixon, Rex and Charlotte. 5/10/2001
Elliott, Richard L. Department of Fish and Game - Region 1, 12/1/1997
Euphrat, Fred. Forest, Soil & Water, Inc., 12/11/1997
Farhi, Seth. 5/14/2001
Fenton, Clark. Salmon Forever, 5/14/2001
Finger, Elizabeth. Jacoby Creek Protection Association, 5/14/2001
Friedrichsen, Gary L. 5/10/2001
Gienger, Richard. Sotoyome Resource Conservation District, 5/15/2001
Halstead, Ted. 4/7/2001
Herman, Thomas. Barnum Timber Co., 10/5/2001
Herman, Thomas M. Barnum & Herman, 5/11/2001
Hofstra, Terrence D. USDI, CDPR, Redwood National and State Parks, 5/15/2001
Kelly, Scott. HJW & Associates, Inc., 12/11/1997
Koch, Donald B. Department of Fish and Game - Region 1, 8/31/1998
Koch, Gene.

Koken, Angela. 5/10/2001

Madej, Mary Ann. USDI, USGS, Western Ecological Research Center, 5/11/2001

McEnhill, Don. Friends of the Russian River-RiverKeeper Project, 5/15/2001

McEnhill, Don. Friends of the Russian River-RiverKeeper Project, 5/15/2001

McEnhill, Don. Friends of the Russian River-RiverKeeper Project, 5/15/2001

Oliveri, Mary Jane. City of Santa Rosa Public Works Department, 5/15/2001

Pjerrou, Mary. Redwood Coast Watersheds Alliance, 5/14/2001

Pjerrou, Mary. Redwood Coast Watershed Alliance, 10/9/2001

Quinn, Scott. Karuk Tribe of California, 5/15/2001

Rische, Carol. Humboldt Bay Municipal Water District, 10/29/2001

Rosen, Elyssa. Sierra Club, 12/11/1997

Rosenblum, John. Rosenblum Environmental Engineering, 12/11/1997

Roth, James. Merritt Smith Consulting, 10/5/2001

Schmidt, Erik. 5/10/2001

Shulz, Tom. Louisiana-Pacific, 12/11/1997

Slota, Dennis. Mendocino County Water Agency, 5/15/2001

Small, Lynn M. City of Santa Rosa Utilities Department, 5/14/2001

Stansberry, Bob and Val. 5/12/2001

Starmer, Keith. DPR, 4/26/2001

Surfleet, Chris. Mendocino Redwood Company, 10/1/2001

Tarvin, Jay. Humboldt Bay Municipal Water District, 4/12/2001

Wunner, Robert. 5/10/2001

Technical References

Anderson, D. 1983. Status of Summer Steelhead Trout in Redwood Creek, Redwood National Park, California. In S. Viers, J. Stohlgren, and C. Schonewald-Cox, ed. Proceedings of the Fourth Conference on Research in California's National Parks, Transactions and Proceedings Series 9. T, 1-8. U.S. DOI, National Park Service.

Bisson, P., Bilby, R. 1991. Avoidance of Suspended Sediment by Juvenile Coho Salmon. North American Journal of Fisheries Management, 4:371-374.

Brown, L. and Moyle, P. 1991. Status of Coho Salmon in California. Report to the National Marine Fisheries Service. Department of Fisheries and Wildlife - University of California at Davis.

Brungs, J., Jones, B. 1977. Temperature Criteria for Freshwater Fish: Protocol and Procedures. Environmental Research Laboratory - Duluth. US EPA.

Burns, J.W. 1970. Spawning Bed Sedimentation Studies in North California Streams. California Fish and Game 56(4). Pages 253-279.

California Department of Fish and Game. 1995. Stream Inventory Reports for Usal Creek and South Fork Usal Creek.

California Department of Fish and Game. Temperature monitoring data 1999.

California Department of Health Services. July 24, 2001. Draft Guidance for Fresh Water Beaches.

California Department of Pesticide Regulation. December 1997. Temporal Distribution of Insecticide Residue in Four California Rivers. Report No. EH97-06.

- California EPA - Office of Environmental Health Hazard Assessment. March 2000. Draft Evaluation of Potential Health Effects of Eating from Black Butte Reservoir (Glenn and Tehama Counties): Guidelines for Sport Fish Consumption.
- California State Water Resources Control Board. 1998. Chemical and Biological Measures of Sediment Quality and Tissue Bioaccumulation in the North Coast Region - Final Report. Bay Protection and Toxic Cleanup Program.
- California State Water Resources Control Board. 2001. State Mussel Watch Program: Preliminary Summary of 1999-2000 Data.
- Campbell Timberland Management, LLC. Gulch 11/South Fork Ten Mile River THP No. 1-00-138 MEN.
- Campbell Timberland Management. One Way Truck Road Timber Harvest Plan. # 1-01-080 MEN, submitted 3/22/01.
- Campbell Timberland Management. Estimated Aquatic Vertebrate Populations North and South Forks Usal Creek 1993-2000.
- Campbell Timberland Management. Scudder Gulch Timber Harvest Plan. #1-01-172 MEN, Submitted 5/15/01.
- City of Santa Rosa Utilities Department: Subregional Water Reclamation System. Laguna Subregional Wastewater Collection, Treatment and Disposal Facility Self-monitoring reports for 2000 and 2001.
- City of Santa Rosa. June - July 2001. Self-monitoring data.
- Department of Fish and Game. December 6, 2000. Marin-Sonoma Counties Agricultural Runoff Influence Investigation: 1999 - 2000 Summary. Appended data 1990 - 1998.
- Department of Fish and Game. Marin-Sonoma Counties Agricultural Runoff Influence Investigation: 2001 data.
- Department of Forestry and Fire Protection, Coast-Cascade Region. 1994-1997. Water Temperatures on Jackson Demonstration State Forest.
- Elliot, J. 1981. Some Aspects of Thermal Stress on Freshwater Teleosts. Pages 209-245 in A.D. Pickering, editor. Stress and Fish. Academic Press, London.
- Forest, Soil & Water. 1996. Greenwood Creek Stream Survey: Data Analysis and Recommendations.
- Georgia Pacific West, Inc. So. Fork Ten Mile River THP No. 1-99-167 MEN.
- Gualala Redwoods Inc. 2001. Stream Report. Unpublished report.
- Hawthorne Timber Co. North Side Smith THP No. 1-01-206 MEN.
- Jobling, M. 1981. Temperature tolerance and the final preferendum - rapid methods for the assessment of optimum growth temperatures. Journal of Fish Biology. 19:439-455.
- Jong, B. 1994. Chinook Salmon Spawning Habitat Quality Evaluation Studies: Shasta River and South Fork Trinity River Basins. California Department of Fish and Game.
- Klein, R. 2001. Suspended Sediment Concentrations and Fluxes in Redwood Creek Tributaries. Unpublished data.
- Knopp, C. 1993. Testing Indices of Cold Water Fish Habitat. North Coast Regional Water Quality Control Board in cooperation with the California Department of Forestry.
- Lewis, T. et al. 2000. Regional Assessment of Stream Temperatures Across Northern California and their Relationship to Various Landscape-Level and Site-Specific Attributes. Forest Science Project. Humboldt State University Foundation, Arcata, CA. 420 pp.
- Ligon, F. et al. 1999. Report of the Scientific Review Panel on California Forest Practice Rules and Salmonid Habitat. Prepared for the Resources Agency of California and the National Marine Fisheries Service. Sacramento, California.
- Lisle, T. and S. Hilton. 1992. The Volume of Fine Sediment in Pools: An Index of Sediment Supply in Gravel-Bed Streams. Water Resources Bulletin Volume 28, No. 2.
- Lisle, T. and S. Hilton. 1999. Fine Bed Material in Pools of Natural Gravel Bed Channels. Water Resources Research. Volume 35, No. 4.
- Madej, M. 1984. Recent Changes in Channel-Stored Sediment Redwood Creek, California. Report for Redwood National Park.

- Madej, M. 1999. Temporal and Spatial Variability in Thalweg Profiles of a Gravel-Bed River. *Earth Surface Processes and Landforms* 24, 1153-1169.
- Marshack, J. 2000. A Compilation of Water Quality Goals. Regional Water Quality Control Board, Central Valley Region.
- Meehan, W. (Editor) 1991. Influences of Forest and Rangeland Management of Salmonid Fishes and Their Habitat. American Fisheries Society Special Publication 19. American Fisheries Society.
- Mendocino Redwood Company. THP No. 1-01-316 MEN.
- Mendocino Redwood Company. THP No. 1-01-358 MEN.
- Mendocino Redwoods Company. Beeside Timber Harvest Plan. #1-01-104 MEN, submitted 5/10/01.
- Mendocino Redwoods Company. Section 27 II Timber Harvest Plan. #1-01-072 MEN, submitted 3/15/01.
- Natural Resources Management. Temperature monitoring data 1997-1999.
- NCRWQCB. 2001. Compilation of reported sediment data from Redwood Creek. Unpublished data.
- NCRWQCB. 2001. Database of Redwood Creek information.
- NCRWQCB. August 14, 1997. Executive Officer's Summary Report by Peter Otis.
- NCRWQCB. August 15, 2001. Gualala River Watershed Technical Support Document for the Total Maximum Daily Load for Sediment.
- NCRWQCB. August 15, 2001. Gualala River Watershed Technical Support Document for the Total Maximum Daily Load for Sediment.
- NCRWQCB. August 2, 2001. Draft Assessment of Aquatic Conditions in the Mendocino Coast Hydrologic Unit.
- NCRWQCB. August 2001. Memo to file. Stemple Creek 303(d) Listing history.
- NCRWQCB. February 28, 1996. Draft Report: Sediment Sample Results for Organic Chemicals, Metals, and Nutrients in the Laguna de Santa Rosa/Mark West Creek System and the Russian River 1985-1986 and 1995.
- NCRWQCB. May 1996. Water Quality Control Plan for the North Coast Region.
- NCRWQCB. Report to File "Russian River Bacteria Levels". December 6, 2001.
- NCRWQCB. Unpublished coliform data. 1979-1980.
- NCRWQCB. Unpublished Data. Data collected under a U.S. EPA Clean Water Act 104(b)(3) Water Quality Grant for Monitoring on the Klamath and Lost Rivers. Sampling occurred from April 3, 1996 through October 18, 1996 and from April 2, 1997 through October 24, 1997.
- NCRWQCB. Unpublished Laguna de Santa Rosa monitoring data. August/September 2001. Under contract with the Sonoma County Water Agency.
- NCRWQCB. Unpublished Russian River and Laguna de Santa Rosa monitoring data. 1997-2000.
- NCRWQCB. Unpublished Russian River coliform monitoring data. 1995-2001.
- Newcombe, C., Jensen, J. 1996. Channel Suspended Sediment and Fisheries: A Synthesis for Quantitative Assessment of Risk and Impact. *North American Journal of Fisheries Management*. November 1996.
- Ozaki, V. and C. Jones. 1998. Long-Term Channel Stability Monitoring on Redwood Creek, 1995-1997 Progress Report. Report for Redwood National Park.
- Ozaki, V., M. Madej and D. Anderson. 1998. Summer Water Temperature Monitoring on Redwood Creek. Progress Report. Redwood Creek National and State Park.
- Peterson, N., A. Hendry, and T. Quinn. 1992. Assessment of Cumulative Effects on Salmonid Habitat; Some Suggested Parameters and Target Conditions. Timber/Fish/Wildlife. TFW-F3-92-001.
- Rasmussen, D. 1990. Toxic Substances Monitoring Program Ten Year Summary Report 1978-1987. State Water Resources Control Board.
- Rasmussen, D. 1995. State Mussel Watch Program, 1987-1993 Data Report. Report No. 94-1 WQ. California State Water Resources Control Board.

- Rasmussen, D. 1995. Toxic Substances Monitoring Program 1992-1993 Data Report. State Water Resources Control Board.
- Rasmussen, D. 1997. Toxic Substances Monitoring Program 1994-1995 Data Report. State Water Resources Control Board.
- Rasmussen, D. 2000. State Mussel Watch Program, 1995-1997 Data Report. California State Water Resources Control Board.
- Redwood National and State Park, 2001. Unpublished temperature data.
- Redwood National and State Park. June 6, 2001. Unpublished fish survey data.
- Redwood National Park. 1999 RNSP Redwood Creek Summer Steelhead Trout Survey.
- Ricker, S. 1997. Evaluation of Salmon and Steelhead Spawning Habitat Quality in the Shasta River Basin, 1997. California Department of Fish and Game. Administrative Report No. 97-9.
- Santa Rosa Press Democrat, Empire News. August 4, 2001. Creek Pollution Unsolved.
- Sigler, J., Bjorunn, T., Everest, F. 1984. Effects of Chronic Turbidity on Density and Growth of Steelheads and Coho Salmon. Transactions of the American Fisheries Society, 113:142-150. American Fisheries Society.
- Simpson Timber Co. Timber Harvest Plan 1-00-314-HUM.
- Sonoma County Water Agency. Stream temperature-monitoring data 1997- 1998.
- Sparkman, M. 2001. Redwood Creek Rotary Screw Trap Downstream Migration Study Redwood Valley, Humboldt County, California. April 4 – August 5, 2000.
- Spence, B., Lomnický, G., Hughes, R., Novitzki, R. 1996. An ecosystem approach to salmonid conservation. Report No. TR-4501-96-6057. ManTech Environmental Research Services Corporation, Corvallis, Oregon.
- State Water Resources Control Board. 2001. Toxic Substances Monitoring Program: Preliminary Summary of 1999 Data.
- Sullivan, K. et al. 2000. An Analysis of the Effects of Temperature on Salmonids of the Pacific Northwest with Implications for Selecting Temperature Criteria. Sustainable Ecosystem Institute.
- Trinity Journal. March 19, 2001. Little Mercury from Mining Found in Trinity Waters.
- US EPA. 1998. Redwood Creek Sediment Total Maximum Daily Load. US EPA Region IX.
- US EPA. 2001. Water Quality Criterion for the Protection of Human Health: Methylmercury. Report No. EPA-823-R-01-001.
- Van Kirk, S. 1994. Historical Information on Redwood Creek. Prepared for Redwood National Park.
- Winchester, W., R. Raymond and S. Tickle. 1995. Lost River Watershed Area in California (Tributary to the Klamath River): Water Quality Characteristics. North Coast Regional Water Quality Control Board. September 29, 1995.
- Yurok Tribal Fisheries Program. 2000. Lower Klamath River Sub-Basin Watershed Restoration Plan.

Page left blank intentionally.

Regional Water Quality Control Board

SAN FRANCISCO BAY REGION (2)



SECTION 303 (d) LIST PROPOSALS

Page left blank intentionally.

Region 2: Arroyo Hondo

Diazinon

Water Body	Arroyo Hondo
Stressor/Media/Beneficial Use	Diazinon/Water/Aquatic Life and Drinking water uses
Data quality assessment. Extent to which data quality requirements met.	QA/QC requirement. Only data of higher overall level of information were used.
Linkage between measurement endpoint and beneficial use or standard	Diazinon linked to Aquatic Life and Drinking water.
Utility of measure for judging if standards or uses are not attained	WQO, Basin Plan.
Water Body-specific Information	This water body was erroneously added to the 1998 as part of the Urban creek listing for Diazinon.
Data used to assess water quality	Listing Factor 3 mistake made in 1998 List. This water body was found to be not part of the Urban Creek tributaries listed on the 1998 list this creek isn't an urban creek at all. Field Reconnaissance in 2001, found this mistake.
Spatial representation	Data was spatially collected.
Temporal representation	Data was temporally collected.
Data type	Numerical data.
Use of standard method	RWQCB methods.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	Delist.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because this body was listed as a mistake and never should have been listed as an Urban Creek.

Region 2: Arroyo Las Positas

Diazinon

Water Body	Arroyo Las Positas
Stressor/Media/Beneficial Use	Diazinon/Water/Aquatic Life (MIGR; SPWN; (COLD); (WARM))
Data quality assessment. Extent to which data quality requirements met.	QA/QC requirement. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Diazinon linked to Aquatic Life Uses.
Utility of measure for judging if standards or uses are not attained	WQO, Basin Plan.
Water Body-specific Information	Water Body was added to the Basin Plan in 1995 as part of the Urban Creeks. It should have been listed in 1998, along with the other Urban Creeks for Diazinon.
Data used to assess water quality	List based on the criteria that was used to list Urban creeks in 1998. This water body should have been listed for Diazinon then, however due to an oversight by staff it was left off the 1998 list and should be placed on the 2002 list.
Spatial representation	Data was collected by RWQCB field reconnaissance in 2001.
Temporal representation	Data was collected by RWQCB field reconnaissance in 2001.
Data type	Numerical data.
Use of standard method	RWQCB methods.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because it was an oversight to not list Arroyo Las Positas (13.5 miles) as part of the Urban Creeks in the San Francisco region.

Region 2: Arroyo Mocho

Diazinon

Water Body	Arroyo Mocho
Stressor/Media/Beneficial Use	Diazinon/Water/Aquatic Life (MIGR; SPWN; (COLD); (WARM))
Data quality assessment. Extent to which data quality requirements met.	QA/QC requirement. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Diazinon linked to Aquatic Life Uses.
Utility of measure for judging if standards or uses are not attained	WQO, Basin Plan.
Water Body-specific Information	Water Body was added to the Basin Plan in 1995 as part of the Urban Creeks. It should have been listed in 1998, along with the other Urban Creeks for Diazinon.
Data used to assess water quality	List based on the criteria that was used to list Urban creeks in 1998. This water body should have been listed for Diazinon then, however due to an oversight by staff it was left off the 1998 list and should be placed on the 2002 list.
Spatial representation	Data was collected by RWQCB field reconnaissance in 2001.
Temporal representation	Data was collected by RWQCB field reconnaissance in 2001.
Data type	Numerical data.
Use of standard method	RWQCB methods.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because it was an oversight not to list Arroyo Mocho (28.5 miles) as part of the Urban Creeks in the San Francisco region.

Region 2: Castro Cove, Richmond

Mercury, Selenium, PAHs, Dieldrin

Water Body	Castro Cove, Richmond
Stressor/Media/Beneficial Use	Mercury, Selenium, PAHs, Dieldrin/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Used BPTCP QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Toxicity linked to aquatic life beneficial use.
Utility of measure for judging if standards or uses are not attained	Toxicity test results (and ERM quotient) for sediment chemistry used.
Water Body-specific Information	Data = 1 year.
Data used to assess water quality	Elevated sediment chemistry (ERM quotient), but only 1 sample, 0 and 33% amphipod survival--2 tests, significant urchin toxicity--1/3 samples, no benthic analyses.
Spatial representation	Samples were analyzed from of a number of sites in the Cove. The spatial extent of the chemical and sediment toxicity measurements are presented in the Consolidated Toxic Hot Spots Cleanup Plan.
Temporal representation	Data collected between 9/94- 5/95.
Data type	Numerical data.
Use of standard method	BPTCP methods used.
Potential Source(s) of Pollutant	Point sources and possibly urban runoff.
Alternative Enforceable Program	<p>The Consolidated Toxic Hot Spots Cleanup Plan presents a variety of corrective actions that need to be completed in order for the cove to be remediated. Responsible parties have been identified.</p> <p>ChevronTexaco has developed a remedial plan that will remove the polluted sediments. The plan was submitted to the RWQCB on June 7, 2002. The company is ready to implement the remedial plan as soon as a final decision on the disposal location of the removed sediments can be made. The company has also committed to spending approximately \$16,000,000 to implement the remedial plan and to fulfill their responsibility to address the polluted sediments. The RWQCB staff estimate the cleanup order will be issued within one year.</p>
RWQCB Recommendation	Monitoring List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program is addressing the problem.</p> <p>The water quality problem is being addressed by ChevronTexaco in partnership with the RWQCB. ChevronTexaco is committed to cleaning up Castro Cove as described in a remediation plan developed with the</p>

Region 2: Castro Cove, Richmond

Mercury, Selenium, PAHs, Dieldrin

RWQCB. The company is in the final stages of developing an enforcement order with the RWQCB to address the polluted sediments. Together they have developed a remedial action plan, which is estimated to cost \$16,000,000. This plan would remove polluted sediments from the Castro Cove and stands ready to be implemented as soon as a final decision on the disposal location of the removed sediments can be made.

Region 2: Central Basin, San Francisco

Mercury, PAHs

Water Body	Central Basin, San Francisco
Stressor/Media/Beneficial Use	Mercury, PAHs/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Used BPTCP QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Sediment toxicity linked to aquatic life beneficial uses.
Utility of measure for judging if standards or uses are not attained	Toxicity test results (and ERM quotient) for sediment chemistry used.
Water Body-specific Information	Data = 2 years.
Data used to assess water quality	Slightly elevated sediment chemistry (ERM quotient), only 1 test, significant amphipod toxicity--1/2 tests significant, urchin toxicity--1/2 samples, no benthic analyses.
Spatial representation	Spatial distribution of samples is described in the report: Sediment quality and biological effects in San Francisco Bay (Bay Protection and Toxic Cleanup Program), dated August 1998.
Temporal representation	Temporal distribution of samples is described in the report: Sediment quality and biological effects in San Francisco Bay (Bay Protection and Toxic Cleanup Program), dated August 1998.
Data type	Numerical data.
Use of standard method	BPTCP methods used.
Potential Source(s) of Pollutant	Not identified.
Alternative Enforceable Program	This site was identified as a moderate priority in the Consolidated Toxic Hot Spots Cleanup Plan. Remediation planning has yet to be completed.
RWQCB Recommendation	Monitoring List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses are applicable and apply to this water body. 4. The evaluation guideline used to interpret narrative water quality standards is adequate. 5. Data are numerical. 6. Standard methods were used.

Region 2: Central Basin, San Francisco

Mercury, PAHs

An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 2: Islais Creek

PCBs, Chlordane, Dieldrin, Endosulfan sulfate, PAHs, anthropogenically +

Water Body	Islais Creek
Stressor/Media/Beneficial Use	PCBs, Chlordane, Dieldrin, Endosulfan sulfate, PAHs, anthropogenically enriched Hydrogen sulfide and Ammonia/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	<p>Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.</p> <p>SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Appropriate QA procedures were followed.</p>
Linkage between measurement endpoint and beneficial use or standard	Sediment Toxicity and benthic community effects are linked to aquatic life beneficial uses.
Utility of measure for judging if standards or uses are not attained	Toxicity test results (and ERM quotient) for sediment chemistry used. WQO in the Basin Plan used.
Water Body-specific Information	Data = 3 years (94-97), Data measured at the site, Environmental Conditions considered at site.
Data used to assess water quality	<p>Elevated sediment chemistry (ERM quotient), Significant amphipod toxicity in 3/4 samples (75%), Significant urchin toxicity in 4/5 samples (80%), Relative benthic index = 0.22, 0.25, 0.43 (3 benthic gradient samples).</p> <p>SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Six transects were monitored over three years and at corresponding sampling stations for each transect (i.e. 1N, 1S). Excluding stations 5 and 6 (No data points in exceedance), the data shows 6/16 sampling stations (1N/S-4N/S) indicate sediment toxicity and amphipod survival below the BPTCP reference tolerance limit. Lead, mercury and zinc all consistently exceeded the ERM values at several stations in all three years surveys conducted. Levels of PAHs, PCBs, Chlordane, DDT and Dieldrin were at the highest detected levels at transect sampling stations 1N/S-4N/S with some pollutants in exceedance of the ERMs in 1998 only.</p>
Spatial representation	Data was spatially collected over the length of the Creek.
Temporal representation	Data was collected from 9/94- 9/97.
Data type	Numerical data.
Use of standard method	BPTCP methods used.
Potential Source(s) of Pollutant	Combined Sewer Overflows/Industrial Point Sources.
Alternative Enforceable Program	The Consolidated Toxic Hot Spots Cleanup Plan presents a variety of corrective actions that need to be completed in order for the cove to be

Region 2: Islais Creek

PCBs, Chlordane, Dieldrin, Endosulfan sulfate, PAHs, anthropogenically +

remediated. Responsible parties have been identified.

RWQCB Recommendation

List: Current application of other regulatory authorities and the effects-based nature of the listing would give this listing a low-priority.

SWRCB Staff Recommendation

After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and pollutants contribute to or cause the problem.

This conclusion is based on the staff findings that:

1. The data is considered to be of adequate quality.
2. The data exhibited sufficient spatial and temporal coverage.
3. Beneficial uses apply and are applicable.
4. The evaluation guideline used to interpret narrative water quality standards is adequate.
5. Data are numerical.
6. Standard methods were used.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate. Even though there is an alternative enforceable program in place, corrective actions to remedy the problem have yet to be implemented. Based on the report provided by SFPUC staff recommend that the extent of impairment should include the portion of Islais Creek from the beginning of the creek up to and encompassing study transect sampling stations 1N/S-- 4N/S.

Region 2: Lake Merritt

Trash

Water Body	Lake Merritt										
Stressor/Media/Beneficial Use	Trash/Water/Aquatic Habitat and REC uses										
Data quality assessment. Extent to which data quality requirements met.	No quality assurance information was provided.										
Linkage between measurement endpoint and beneficial use or standard	Trash linked to Aquatic Habitat and REC uses.										
Utility of measure for judging if standards or uses are not attained	Photographs can indicate gross impacts on beneficial uses and whether standards have been exceeded. Measurements of the amounts of trash can provide a relative measure of the potential for nuisance.										
Water Body-specific Information	Photographs were submitted that were taken on one occasion. The data for trash removed from the Lake was collect by Lake Merritt Institute volunteers between 1998 and 2001.										
Data used to assess water quality	<p>Lake Merritt volunteers have documented trash removal from the Lake. Large amounts of trash were collected in the Lake as follows:</p> <table> <tr> <th>Year</th><th>Amount (pounds)</th></tr> <tr> <td>1998</td><td>30,961</td></tr> <tr> <td>1999</td><td>39,233</td></tr> <tr> <td>2000</td><td>40,900</td></tr> <tr> <td>2001</td><td>20,640 (4 months only)</td></tr> </table> <p>Six photographs were submitted depicting what appeared to be locations in the Lake. The trash included accumulations of plastic bottles, styrofoam cups, paper wrappers, wood debris, aluminum cans, and other unidentifiable debris. A photograph was submitted depicting a dead bird in the lake wrapped in debris. Another bird death is reported as being caused by entanglement in a length of rope.</p>	Year	Amount (pounds)	1998	30,961	1999	39,233	2000	40,900	2001	20,640 (4 months only)
Year	Amount (pounds)										
1998	30,961										
1999	39,233										
2000	40,900										
2001	20,640 (4 months only)										
Spatial representation	Unknown.										
Temporal representation	Trash removal data collected monthly over 3 1/3 years. Cannot tell when the bird deaths occurred.										
Data type	Both numerical and non-numerical data.										
Use of standard method	No methods described.										
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers.										
Alternative Enforceable Program	Possibly the urban storm water permits.										
RWQCB Recommendation	Change in listed water body. Change pollutant from Floating Material to Trash.										
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body pollutant should be changed in this already listed water body, from Floating Material to Trash.										

Region 2: Marina Lagoon (San Mateo Co.)

High Coliform Count

Water Body	Marina Lagoon (San Mateo Co.)
Stressor/Media/Beneficial Use	High Coliform Count/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	High Coliform Counts are linked to REC-1 uses.
Utility of measure for judging if standards or uses are not attained	Basin Plan objectives and Ocean Plan water contact standards used.
Water Body-specific Information	Data = 2 years (98-2000), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	192 samples for total coliform there were Basin Plan Objectives violated in 1% of the samples. Basin Plan Objectives violated in 50% of samples for total coliform median. Basin Plan Objectives violated in 10% of samples for fecal coliform geomean. Basin Plan Objectives violated in 33% of samples for fecal coliform 90th percentile in dry weather months. Basin Plan Objectives violated for E. coli data in 31% of the samples.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected, from 10/7/98-10/31/00.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers, Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality objective used is applicable. 5. Data are numerical. 6. Standard methods were used.

Region 2: Marina Lagoon (San Mateo Co.)

High Coliform Count

7. Other water body- or site-specific information including the effects of season and age of the data were considered.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 2: Mission Creek

Silver, Chromium, Copper, Mercury, Lead, Zinc, Chlordane, Chlorpyrifos +

Water Body	Mission Creek
Stressor/Media/Beneficial Use	Silver, Chromium, Copper, Mercury, Lead, Zinc, Chlordane, Chlorpyrifos, Dieldrin, Mirex, PCBs, PAHs, anthropogenically enriched Hydrogen sulfide and Ammonia/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	<p>Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.</p> <p>SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Appropriate QA procedures were followed.</p>
Linkage between measurement endpoint and beneficial use or standard	<i>Sediment toxicity and benthic community effects are linked to aquatic life beneficial uses.</i>
Utility of measure for judging if standards or uses are not attained	Toxicity test results (and ERM quotient) for sediment chemistry used.
Water Body-specific Information	Data = 2 years (95-97), Data measured at the site, Environmental Conditions considered at site.
Data used to assess water quality	<p>BPTCP Data: Elevated sediment chemistry (ERM quotient) significant amphipod toxicity, 3/5 tests (60%) significant urchin toxicity, 3/5 samples (60%), relative benthic index = 0.00, 0.34, and 0.65 (3 benthic gradient samples).</p> <p>SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Six transects were monitored over three years and at corresponding North and South sampling stations for each transect (i.e. 1N, 1S). Excluding stations 5 and 6 (No data for 1999 and 2000), the data shows 4/20 sampling stations (1N/S-4N/S) indicate sediment toxicity and amphipod survival below the BPTCP reference tolerance limit. Lead, mercury, zinc, silver and nickel all exceeded the ERM values at several stations in all three years surveys conducted. Levels of PAHs, PCBs, Chlordane, DDT and Dieldrin were at the highest detected levels at transect sampling stations 1N/S-4N/S with some pollutants in exceedance of the ERMs in 1998 only.</p>
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected, from 5/95-4/97.
Data type	Numerical data.
Use of standard method	BPTCP methods used.
Potential Source(s) of Pollutant	Combined Sewer Overflows/Industrial Point Sources.
Alternative Enforceable Program	The Consolidated Toxic Hot Spots Cleanup Plan presents a variety of corrective actions that need to be completed in order for the cove to be

Region 2: Mission Creek

Silver, Chromium, Copper, Mercury, Lead, Zinc, Chlordane, Chlorpyrifos +

RWQCB Recommendation

remediated. Responsible parties have been identified.

List: Current application of other regulatory authorities and the effects-based nature of the listing would give this listing a low-priority.

SWRCB Staff Recommendation

After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and pollutants contribute to or cause the problem.

This conclusion is based on the staff findings that:

1. The data is considered to be of adequate quality.
2. The data exhibited sufficient spatial and temporal coverage.
3. Beneficial uses apply and are applicable.
4. The evaluation guideline used to interpret narrative water quality standards is adequate.
5. Data are numerical.
6. Standard methods were used.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate. Even though there is an alternative enforceable program in place, corrective actions to remedy the problem have yet to be implemented. Based on the report provided by SFPUC staff recommend that the extent of impairment should include the portion of Mission Creek from the beginning of the creek up to approximately 4th Street (encompassing study transect sampling stations 1N/S-- 4N/S).

Region 2: Oakland Inner Harbor (Fruitvale site)

Chlordane, PCBs

Water Body	Oakland Inner Harbor (Fruitvale site)
Stressor/Media/Beneficial Use	Chlordane, PCBs/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Used BPTCP QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Sediment Toxicity linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Toxicity test results (ERM quotient) for sediment used.
Water Body-specific Information	Data = 2 years. Data are 5 years old.
Data used to assess water quality	Slightly elevated sediment chemistry (ERM quotient), but only 1 sample, significant amphipod toxicity 2/2 tests, no significant urchin toxicity 2 tests, no benthic analyses.
Spatial representation	Spatial distribution of samples is described in the report: Sediment quality and biological effects in San Francisco Bay (Bay Protection and Toxic Cleanup Program), dated August 1998.
Temporal representation	Data collected during 4/95- 4/97.
Data type	Numerical data.
Use of standard method	BPTCP methods used.
Potential Source(s) of Pollutant	Not identified.
Alternative Enforceable Program	This site was identified as a moderate priority in the Consolidated Toxic Hot Spots Cleanup Plan. Remediation planning has yet to be completed.
RWQCB Recommendation	Monitoring List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses are applicable and apply to this water body. 4. The evaluation guideline used to interpret narrative water quality standards is adequate. 5. Data are numerical. 6. Standard methods were used. <p>An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 2: Oakland Inner Harbor (Pacific Dry-dock Yard 1 site)

Copper, Lead, Mercury, Zinc, TBT, ppDDE, PCBs, PAHs, Chlorpyrifos, Chl +

Water Body	Oakland Inner Harbor (Pacific Dry-dock Yard 1 site)
Stressor/Media/Beneficial Use	Copper, Lead, Mercury, Zinc, TBT, ppDDE, PCBs, PAHs, Chlorpyrifos, Chlordane, Dieldrin, Mirex/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Used BPTCP QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Sediment toxicity linked to aquatic life beneficial uses.
Utility of measure for judging if standards or uses are not attained	Toxicity test results (and ERM quotient) for sediment chemistry used.
Water Body-specific Information	Data = 2 years. Data are 5 years old.
Data used to assess water quality	Elevated sediment chemistry (ERM quotient), significant amphipod toxicity 2/4 tests, no significant urchin toxicity (4 tests), no benthic analyses.
Spatial representation	Spatial distribution of samples is described in the report: Sediment quality and biological effects in San Francisco Bay (Bay Protection and Toxic Cleanup Program), dated August 1998.
Temporal representation	Data collected during 4/95- 4/97.
Data type	Numerical data.
Use of standard method	BPTCP methods used.
Potential Source(s) of Pollutant	Not identified.
Alternative Enforceable Program	This site was identified as a moderate priority in the Consolidated Toxic Hot Spots Cleanup Plan. Remediation planning has yet to be completed.
RWQCB Recommendation	Monitoring List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses are applicable and apply to this water body.4. The evaluation guideline used to interpret narrative water quality standards is adequate.5. Data are numerical.6. Standard methods were used. <p>An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 2: Pacific Ocean at Baker Beach

High Coliform Count

Water Body	Pacific Ocean at Baker Beach
Stressor/Media/Beneficial Use	High Coliform Count/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	USEPA Storet data. QA/QC requirement. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Total and fecal coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO, Ocean Plan used.
Water Body-specific Information	Data = 11 months (7/97-5/98), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 164 samples total. Ocean Plan objectives violated in 9.7% of the samples for total coliform in dry-weather months. Combined sewer overflow events are not considered because all CSOs in the vicinity have been directed away from Lobos Creek drainage onto Baker Beach.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected, from 7/1/97-5/29/98.
Data type	Numerical data.
Use of standard method	USEPA methods.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers, Combined Sewer Overflows.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if applicable water quality standards are exceeded.

Region 2: Pacific Ocean at China Beach

Beach Closures

Water Body	Pacific Ocean at China Beach
Stressor/Media/Beneficial Use	Beach Closures/Water/REC-1.
Data quality assessment. Extent to which data quality requirements met.	QA/QC requirement. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Beach Closures linked to REC-1.
Utility of measure for judging if standards or uses are not attained	USEPA Guidance (1996).
Water Body-specific Information	Data = 2000 Beach closure data.
Data used to assess water quality	The data show that no beach closures occurred on this beach from 1998-2002. The original RWQCB recommendation to list was based on rainfall and combined sewer overflow events. This data must not be considered since all CSOs in the city are treated and therefore do not result in beach closures. The recommendation was also based on NRDC data which lead the RWQCB to make recommendations on beach advisories or warnings, not actual beach closures.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers, Combined Sewer Overflows.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	The SFRWQCB discovered erroneous available information on which they relied to make recommendations to the 303(d) list. Specifically, "Testing the Waters, 2000", authored by the Natural Resources Defense Council (NRDC), intermingled posted beach warnings with beach closures, leading us to make recommendations for listing for beach closures that were based only on beach advisories or warnings. The EPA guidance used in the 303(d) analysis is only pertinent to evaluation of beach closure information, where more than one beach closure per year, or one beach closure over one week duration, both constitute adequate basis for inclusion in the 303(d) list. Therefore, the RWQCB re-examined the original rationale for beach closure-related listings, to verify whether or not the recommendations were made on posted warnings or actual closures. They recommend to exclude Pacific Ocean at China Beach from listing.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because

Region 2: Pacific Ocean at China Beach

Beach Closures

applicable water quality standards are not exceeded. This water body should be excluded from the 303(d) list because the indicator used did not characterize beach conditions or represent standards exceedances.

Region 2: Pacific Ocean at Fitzgerald Marine Reserve

High Coliform Count

Water Body	Pacific Ocean at Fitzgerald Marine Reserve
Stressor/Media/Beneficial Use	High Coliform Count/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Total and Fecal Coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Ocean Plan and Basin Plan used.
Water Body-specific Information	Data = 3 years (5/98-10/00), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 49 samples total. Ocean Plan Objectives violated in 43% of the samples for total coliform in dry-weather months. Basin Plan Objectives were violated in 16% of samples for log mean, and in 73% of samples in dry weather months.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected, from 5/98-10/98, 5/99-10/99 and 5/00-10/00.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Department. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality objective used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used.

Region 2: Pacific Ocean at Fitzgerald Marine Reserve

High Coliform Count

8. Other water body- or site-specific information including the effects of season, and age of the data were considered.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 2: Pacific Ocean at Fitzgerald Marine Reserve

Beach Closures

Water Body	Pacific Ocean at Fitzgerald Marine Reserve
Stressor/Media/Beneficial Use	Beach Closures/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Basin Plan and Ocean Plan used.
Water Body-specific Information	Data = 2000 Beach closure data.
Data used to assess water quality	The information used to recommend this listing from the NRDC report was based on the SWRCB's year 2000 beach advisory postings, and not actual closures. A review of the SWRCB information on San Mateo County beaches shows that the listings were recommended in error. All of the information in the NRDC report was based on SWRCB's year 2000 beach advisory "postings", and not actual closures.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	We recommend excluding five San Mateo County beaches from the 303(d) list recommendations for beach closures. The RWQCB recommends excluding Pacific Ocean at Fitzgerald Marine Reserve from listing.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded. This water body should be excluded from the 303(d) list because the indicator used did not characterize beach conditions or represent standards exceedances.

Region 2: Pacific Ocean at Fort Funston Beach

Beach Closures

Water Body	Pacific Ocean at Fort Funston Beach
Stressor/Media/Beneficial Use	Beach Closures/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	QA/QC requirement. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Beach Closures linked to REC-1.
Utility of measure for judging if standards or uses are not attained	USEPA Guidance (1996).
Water Body-specific Information	Data = 2000 Beach closure data.
Data used to assess water quality	The data show that no beach closures occurred on this beach from 1998-2002. The original RWQCB recommendation to list was based on rainfall and combined sewer overflow events. This data must not be considered since all CSOs in the city are treated and therefore do not result in beach closures. The recommendation was also based on NRDC data which lead the RWQCB to make recommendations on beach advisories or warnings, not actual beach closures.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	RWQCB methods.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers, Combined Sewer Overflows.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	The SFRWQCB discovered erroneous available information on which they relied to make recommendations to the 303(d) list. Specifically, "Testing the Waters, 2000", authored by the Natural Resources Defense Council (NRDC), intermingled posted beach warnings with beach closures, leading us to make recommendations for listing for beach closures that were based only on beach advisories or warnings. The EPA guidance used in the 303(d) analysis is only pertinent to evaluation of beach closure information, where more than one beach closure per year, or one beach closure over one week duration, both constitute adequate basis for inclusion in the 303(d) list. Therefore, the RWQCB re-examined the original rationale for beach closure-related listings, to verify whether or not the recommendations were made on posted warnings or actual closures. They were not made on actual beach closures. They recommend to exclude Pacific Ocean at Fort Funston Beach from listing.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the

Region 2: Pacific Ocean at Fort Funston Beach

Beach Closures

water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded. This water body should be excluded from the 303(d) list because the indicator used did not characterize beach conditions or represent standards exceedances.

Region 2: Pacific Ocean at Ocean Beach

Beach Closures

Water Body	Pacific Ocean at Ocean Beach
Stressor/Media/Beneficial Use	Beach Closures/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	QA/QC requirement. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Beach Closures linked to REC-1.
Utility of measure for judging if standards or uses are not attained	USEPA Guidance (1996).
Water Body-specific Information	Data = 2000 Beach closure data.
Data used to assess water quality	The data show that no beach closures occurred on this beach from 1998-2002. The original RWQCB recommendation to list was based on rainfall and combined sewer overflow events. This data must not be considered since all CSOs in the city are treated and therefore do not result in beach closures. The recommendation was also based on NRDC data which lead the RWQCB to make recommendations on beach advisories or warnings, not actual beach closures.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	RWQCB methods.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers, Combined Sewer Overflows.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	The SFRWQCB discovered erroneous available information on which they relied to make recommendations to the 303(d) list. Specifically, "Testing the Waters, 2000", authored by the Natural Resources Defense Council (NRDC), intermingled posted beach warnings with beach closures, leading us to make recommendations for listing for beach closures that were based only on beach advisories or warnings. The EPA guidance used in the 303(d) analysis is only pertinent to evaluation of beach closure information, where more than one beach closure per year, or one beach closure over one week duration, both constitute adequate basis for inclusion in the 303(d) list. Therefore, the RWQCB had to re-examine the original rationale for beach closure-related listings, to verify whether or not the recommendations were made on posted warnings or actual closures. They were not made on actual closures and they recommend to exclude Pacific Ocean at Ocean Beach from listing.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the

Region 2: Pacific Ocean at Ocean Beach Beach Closures

water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded. This water body should be excluded from the 303(d) list because the indicator used did not characterize beach conditions or represent standards exceedances.

Region 2: Pacific Ocean at Pacifica State Beach (Linda Mar or San Ped + High Coliform Count)

Water Body	Pacific Ocean at Pacifica State Beach (Linda Mar or San Pedro Beach)
Stressor/Media/Beneficial Use	High Coliform Count/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Department, Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Total and Fecal Coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Ocean Plan used.
Water Body-specific Information	Data = 3 years (1/98-1/01), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 36 wet weather samples. Ocean Plan Objectives violated in 22% of samples for total coliform in wet-weather months. This listing is driven by wet weather only. Ocean Plan objectives violated in 19% of samples for fecal coliform. No exceedances between May and October. Wet weather exceedances.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected from 1/98-1/01.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Department, Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers, Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality objective used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical.

Region 2: Pacific Ocean at Pacifica State Beach (Linda Mar or San Ped + High Coliform Count)

7. Standard methods were used.

8. Other water body- or site-specific information including the effects of season and age of the data were considered.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 2: Pacific Ocean at Pacifica State Beach (Linda Mar or San Ped + Beach Closures

Water Body	Pacific Ocean at Pacifica State Beach (Linda Mar or San Pedro Beach)
Stressor/Media/Beneficial Use	Beach Closures/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Department, Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Ocean Plan used.
Water Body-specific Information	Data = 2000 Beach closure data.
Data used to assess water quality	The data show that since Spring of 1998 no closures at this beach have been reported. The information used to recommend this listing from the NRDC report was based on the SWRCB's year 2000 beach advisory postings, and not actual closures.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers, Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	A review of the SWRCB information on San Mateo County beaches shows that the listings were recommended in error. All of the information in the NRDC report was based on SWRCB's year 2000 beach advisory "precautionary postings", and not actual closures. As such, the RWQCB recommends excluding five San Mateo County beaches from the 303(d) list recommendations for beach closures. The RWQCB recommends excluding Pacific Ocean at Pacifica State Beach from listing.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded. This water body should be excluded from the 303(d) list because the indicator used did not characterize beach conditions or represent standards exceedances.

Region 2: Pacific Ocean at Pillar Point Beach Beach Closures

Water Body	Pacific Ocean at Pillar Point Beach
Stressor/Media/Beneficial Use	Beach Closures/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Department, Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO, Ocean Plan.
Water Body-specific Information	Data = 2000 Beach closure data.
Data used to assess water quality	The information used to recommend this listing from the NRDC report was based on the SWRCB's year 2000 beach advisory postings, and not actual closures.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	A review of the SWRCB information on San Mateo County beaches shows that the listings were recommended in error. All of the information in the NRDC report was based on SWRCB's year 2000 beach advisory "precautionary postings", and not actual closures. As such, the RWQCB recommends excluding five San Mateo County beaches from the 303(d) list recommendations for beach closures. The RWQCB recommends excluding Pacific Ocean at Pillar Point Beach from listing.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded. This water body should be excluded from the 303(d) list because the indicator used did not characterize beach conditions or represent standards exceedances.

Region 2: Pacific Ocean at Pillar Point Beach

High Coliform Count

Water Body	Pacific Ocean at Pillar Point Beach
Stressor/Media/Beneficial Use	High Coliform Count/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Department, Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Total and Fecal Coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Ocean Plan used.
Water Body-specific Information	Data = 3 years (5/98-10/00), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 143 samples total. Ocean Plan objectives violated in 40% of samples for total coliform in dry-weather months. Ocean Plan objectives violated in 9% of the samples for log mean and 35% of the samples for fecal coliform in dry weather months.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected, from 5/98-10/98, 5/99-10/99 and 5/00-10/00.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality objective used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used.

Region 2: Pacific Ocean at Pillar Point Beach

High Coliform Count

8. Other water body- or site-specific information including the effects of season and age of the data were considered.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 2: Pacific Ocean at Rockaway Beach

High Coliform Count

Water Body	Pacific Ocean at Rockaway Beach
Stressor/Media/Beneficial Use	High Coliform Count/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Total and Fecal Coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Ocean Plan used.
Water Body-specific Information	Data = 1 year (2000), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 23 samples total. Ocean Plan objectives violated in 13% of samples for total coliform in dry-weather months.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected, from 5/00-10/00.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers, Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality objective used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- or site-specific information including the effects of season and age of the data were considered.

Region 2: Pacific Ocean at Rockaway Beach

High Coliform Count

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 2: Pacific Ocean at San Gregorio Beach

High Coliform Count

Water Body	Pacific Ocean at San Gregorio Beach
Stressor/Media/Beneficial Use	High Coliform Count/Water/REC-I
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Total and Fecal Coliform linked to REC-I.
Utility of measure for judging if standards or uses are not attained	WQO Ocean Plan used
Water Body-specific Information	Data = 3 years (98-2001), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 56 samples for total coliform, 23 samples for fecal coliform. Ocean Plan objectives violated in 5% of samples for total coliform in combined dry- and wet-weather months. Ocean Plan objectives violated in 8% samples for fecal coliform, wet-weather only. No exceedances between May and October. Listing driven by wet weather exceedances.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected, from 9/98-3/01.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if applicable water quality standards are exceeded.

Region 2: Pacific Ocean at Sharp Park Beach

Beach Closures

Water Body	Pacific Ocean at Sharp Park Beach
Stressor/Media/Beneficial Use	Beach Closures/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	QA/QC requirement. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Beach Closures linked to REC-1.
Utility of measure for judging if standards or uses are not attained	USEPA Guidance (1996)
Water Body-specific Information	Data = 2000 Beach closure data.
Data used to assess water quality	The information used to recommend this listing from the NRDC report was based on the SWRCB's year 2000 beach advisory postings, and not actual closures.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	RWQCB methods.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	A review of the SWRCB information on San Mateo County beaches shows that the listings were recommended in error. All of the information in the NRDC report was based on SWRCB's year 2000 beach advisory "precautionary postings", and not actual closures. As such, the RWQCB recommends excluding five San Mateo County beaches from the 303(d) list recommendations for beach closures. The RWQCB recommends excluding Pacific Ocean at Sharp Park Beach from listing.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded. This water body should be excluded from the 303(d) list because the indicator used did not characterize beach conditions or represent standards exceedances.

Region 2: Pacific Ocean at Surfer's Beach

Total Coliform

Water Body	Pacific Ocean at Surfer's Beach
Stressor/Media/Beneficial Use	Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Total and Fecal Coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Ocean Plan used.
Water Body-specific Information	Data = 4 years (97-2001), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 134 total coliform samples, 126 fecal coliform samples. Ocean Plan objectives violated in 5% samples for total coliform in combined dry-weather and wet-weather months. Ocean Plan objectives violated in 9% of samples for fecal coliform in combined wet-dry weather. No exceedances between May and October. Listing driven by wet weather only.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected, from 7/97-1/01.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the applicable water quality standards are not exceeded.

Region 2: Pacific Ocean at Surfer's Beach Beach Closures

Water Body	Pacific Ocean at Surfer's Beach
Stressor/Media/Beneficial Use	Beach Closures/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Ocean Plan used.
Water Body-specific Information	Data = 2000 Beach closure data.
Data used to assess water quality	The information used to recommend this listing from the NRDC report was based on the SWRCB's year 2000 beach advisory postings, and not actual closures.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	A review of the SWRCB information on San Mateo County beaches shows that the listings were recommended in error. All of the information in the NRDC report was based on SWRCB's year 2000 beach advisory "precautionary postings", and not actual closures. As such, the RWQCB recommends excluding five San Mateo County beaches from the 303(d) list recommendations for beach closures. The RWQCB recommends excluding Pacific Ocean at Surfer's Beach from listing.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded. This water body should be excluded from the 303(d) list because the indicator used did not characterize beach conditions or represent standards exceedances.

Region 2: Pacific Ocean at Venice Beach

High Coliform

Water Body	Pacific Ocean at Venice Beach
Stressor/Media/Beneficial Use	High Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Ocean Plan used.
Water Body-specific Information	Data = 2 years (98-2000), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 30 samples. Ocean Plan violated in 13% of samples for total coliform in dry-weather months.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected from 9/28/98-10/31/00.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality objective used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- or site-specific information including the effects of season and age of the data were considered.

Region 2: Pacific Ocean at Venice Beach

High Coliform

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 2: Pacific Ocean at Venice Beach

Beach Closures

Water Body	Pacific Ocean at Venice Beach
Stressor/Media/Beneficial Use	Beach Closures/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Ocean Plan used.
Water Body-specific Information	Data = 2000 Beach closure data. Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	The beach closures were based on high coliform counts. Percent exceedances were calculated for the maximum, median, and geometric Basin Plan and Ocean Plan Objectives. There were exceedances of the objectives, and consistent with USEPA guidance (1996), the beach is recommended to be listed.
Spatial representation	Data was spatially collected.
Temporal representation	Data was temporally collected.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Department, Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers.
Alternative Enforceable Program	
RWQCB Recommendation	A review of the SWRCB information on San Mateo County beaches shows that the listings were recommended in error. All of the information in the NRDC report was based on SWRCB's year 2000 beach advisory "precautionary postings", and not actual closures. As such, the RWQCB recommends excluding five San Mateo County beaches from the 303(d) list recommendations for beach closures. The RWQCB recommends excluding Pacific Ocean at Surfer's Beach from listing.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded. This water body should be excluded from the 303(d) List, because the indicator used did not characterize beach conditions or represent standards exceedances.

Region 2: Petaluma River

Diazinon

Water Body	Petaluma River
Stressor/Media/Beneficial Use	Diazinon/Water/Aquatic life (WARM; MIGR)
Data quality assessment. Extent to which data quality requirements met.	Abelli-Amen, Petaluma Tree Planters data used. QA/QC requirement. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Diazinon linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CDFG Acute Criterion, WQO
Water Body-specific Information	Data = 4 months (7/98-11/98), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 36 samples total. CDFG acute criteria for Diazinon was violated in 33% of the samples. The criteria was used to determine the exceedance of the WQO.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected, from 7/98-11/98.
Data type	Numerical data.
Use of standard method	Abelli-Amen, Petaluma Tree Planters, RWQCB methods.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- or site-specific information including the effects of season and age of the data were considered.

Region 2: Petaluma River

Diazinon

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 2: Petaluma River (tidal portion)

Nickel

Water Body	Petaluma River (tidal portion)
Stressor/Media/Beneficial Use	Nickel/Water/Aquatic Life (WARM, MIGR)
Data quality assessment. Extent to which data quality requirements met.	Used Regional Monitoring Program (RMP) and Special TMDL study QA/QC. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Nickel linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR, WQO Basin Plan.
Water Body-specific Information	Data = 8 years (93-2001), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Using the CTR, there have been 4 exceedances since 1993, two were twice the Basin Plan Objective amounts.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected from 3/93-4/01.
Data type	Numerical data.
Use of standard method	Regional Monitoring Program (RMP) methods.
Potential Source(s) of Pollutant	Municipal Point Sources, Urban Runoff/Storm Sewers, Atmospheric Deposition.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses have been established.4. Water quality standard used is applicable.5. The evaluation guideline used to interpret narrative water quality standards is adequate.6. Data are numerical.7. Standard methods were used.8. Other water body- or site-specific information including the effects of season and age of the data were considered.

Region 2: Petaluma River (tidal portion)

Nickel

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate. List the Petaluma River (tidal portion) for nickel.

Region 2: Petaluma River (tidal portion)

Copper

Water Body	Petaluma River (tidal portion)
Stressor/Media/Beneficial Use	Copper/Water/Aquatic Life (WARM, MIGR)
Data quality assessment. Extent to which data quality requirements met.	Used Regional Monitoring Program (RMP) and Special TMDL study QA/QC. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Copper linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO Basin Plan used.
Water Body-specific Information	Data = 8 years (93-2001), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	There were 15 exceedances since 1993. New information sent to the SWRCB in a memo on 2/26/02 changes this finding. The modified rationale, based on water effect ratio (WER) information, shows that copper levels are below applicable thresholds of impairment in the Petaluma River (tidal portion). Available water effect ratio (WER) data support the RWQCB recommendation to de-list copper.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected from 3/93-4/01.
Data type	Numerical data.
Use of standard method	Regional Monitoring Program (RMP) methods.
Potential Source(s) of Pollutant	Municipal Point Sources, Urban Runoff/Storm Sewers, Atmospheric Deposition.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	Exclude from the List. This listing was made in the Draft Staff report. However a memo sent on 2/26/02 made mention that the RB no longer wishes to list the mouth of the Petaluma river for copper. This finding to withdraw the recommendation is based on the modified rationale to list, based on Water Effect Ratio (WER) information. The new information shows the copper levels are below the threshold for exceedance, there is no need for the river to be listed.
SWRCB Staff Recommendation	Exclude from the List. SWRCB staff agrees with the RWQCB recommendation to withdraw this listing for 2002 due to new WER information.

Region 2: Peyton Slough

Silver, Cadmium, Copper, Selenium, Zinc, PCBs, Chlordane, ppDDE, Pyren +

Water Body	Peyton Slough
Stressor/Media/Beneficial Use	Silver, Cadmium, Copper, Selenium, Zinc, PCBs, Chlordane, ppDDE, Pyrene/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Sediment toxicity linked to the aquatic life beneficial use. Benthic community effects are direct measures of the aquatic life beneficial use.
Utility of measure for judging if standards or uses are not attained	Toxicity test results (and ERM quotient) for sediment chemistry used.
Water Body-specific Information	Data = 2 years (95-97), Data measured at the site, Environmental Conditions considered at site.
Data used to assess water quality	Elevated sediment chemistry (ERM quotient), significant amphipod toxicity in 4/5 samples (80%), significant urchin toxicity--4/5 samples (80%), relative benthic index = 0.36, 0.51, 0.34 (3 benthic gradient samples).
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected, from 5/95-4/97.
Data type	Numerical data.
Use of standard method	BPTCP methods.
Potential Source(s) of Pollutant	Industrial Point Sources.
Alternative Enforceable Program	Peyton Slough is identified as a toxic hot spot in the SWRCB Consolidated Toxic Hot Spots Cleanup Plan SWRCB Resolution No. 99-065). This plan is being implemented through a Cleanup and Abatement Order. San Francisco Bay RWQCB Order No. 01-094 provides direction for the remediation of the identified problems in Peyton Slough. The Order establishes requirements for a remedial design report and implementation schedule, documentation of the remediation of Peyton Slough, and five-year status report on the effectiveness of the implementation of the approved cleanup plan.
RWQCB Recommendation	List: Current application of other regulatory authorities and the effects-based nature of the listing would give this listing a low-priority.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program is addressing the problem.

Region 2: Peyton Slough

Silver, Cadmium, Copper, Selenium, Zinc, PCBs, Chlordane, ppDDE, Pyren +

The water quality problem is being addressed by implementation of the Consolidated Toxic Hot Spots Cleanup Plan using Cleanup and Abatement Orders.

Region 2: Pomponino Creek

High Coliform Count

Water Body	Pomponino Creek
Stressor/Media/Beneficial Use	High Coliform Count/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	High Coliform Counts are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Basin Plan used.
Water Body-specific Information	Data = 5 months (2000), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 44 samples for total coliform, 23 samples for fecal coliform, 21 E. coli samples. Basin Plan objectives violated in 64% samples for total coliform median. Basin Plan objectives violated in 3% samples for fecal coliform geomean. Basin Plan Objectives violated in 17% samples for fecal coliform in dry-weather months. E. coli data showed Basin Plan objectives violated in 5% samples for all the beach uses in dry weather months.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected from 6/12/00-10/31/00.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Department, Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality objective used is applicable. 5. Data are numerical.

Region 2: Pomponino Creek

High Coliform Count

6. Standard methods were used.

7. Other water body- or site-specific information including the effects of season and age of the data were considered.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 2: San Gregorio Creek

High Coliform Count

Water Body	San Gregorio Creek
Stressor/Media/Beneficial Use	High Coliform Count/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	High Coliform Counts are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Basin Plan used.
Water Body-specific Information	Data = 2 years (98-2000), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 56 samples for total coliform, 23 samples for fecal coliform, 22 samples for E. coli. Basin Plan objectives violated in 2% samples for total coliform maximum. Objectives violated in 73% samples for total coliform median. Basin Plan objectives violated in 26% samples for fecal coliform geomean. Objectives violated in 43% samples for fecal coliform in dry-weather months. E. coli data show 45% samples for total coliform maximum designated beach violated the Basin Plan Objectives. Basin Plan objectives violated in 45% samples for E. coli maximum moderately-used beach, violated in 18% samples for maximum lightly-used beach and violated in 45% samples for maximum infrequently-used beach, in dry weather months.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected from 9/28/98-10/31/00.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Department, Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality.

Region 2: San Gregorio Creek

High Coliform Count

2. The data exhibited sufficient spatial and temporal coverage.
3. Beneficial uses apply to the water body.
4. Water quality objective used is applicable.
5. Data are numerical.
6. Standard methods were used.
8. Other water body- or site-specific information including the age of the data were considered.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 2: San Leandro Bay

Mercury, Lead, Selenium, Zinc, PAHs, DDT, Pesticides

Water Body	San Leandro Bay
Stressor/Media/Beneficial Use	Mercury, Lead, Selenium, Zinc, PAHs, DDT, Pesticides/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP QA/QC. SFEI Study dated 2001 used appropriate QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Sediment toxicity linked to aquatic life beneficial uses.
Utility of measure for judging if standards or uses are not attained	Toxicity test results (and ERM quotient) for sediment chemistry used.
Water Body-specific Information	
Data used to assess water quality	Elevated sediment chemistry (ERM quotient), 5/6 tests, Significant amphipod toxicity 3/7 tests, Significant urchin toxicity 3/7 tests, no indication of significant degradation from benthic analyses.
Spatial representation	Spatial distribution of samples is described in the report: Sediment quality and biological effects in San Francisco Bay (Bay Protection and Toxic Cleanup Program), dated August 1998.
Temporal representation	Temporal distribution of samples is described in the report: Sediment quality and biological effects in San Francisco Bay (Bay Protection and Toxic Cleanup Program), dated August 1998.
Data type	Numerical data.
Use of standard method	BPTCP methods used.
Potential Source(s) of Pollutant	Not identified.
Alternative Enforceable Program	<p>This site was identified as a moderate priority in the Consolidated Toxic Hot Spots Cleanup Plan. Remediation planning has yet to be completed.</p> <p>A listing is not proposed for PCBs in San Leandro Bay because such a proposal is already subsumed in the more general listing for PCBs in Central San Francisco Bay. Consequently, it is not necessary to list San Leandro Bay for PCBs because the PCBs in sediment will be addressed in the development of the TMDL for PCBs in Central San Francisco Bay.</p>
RWQCB Recommendation	Monitoring List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. A listing is not proposed for PCBs in the sediments of San Leandro Bay because such a proposal is already subsumed in the more general listing for PCBs in Central San Francisco Bay.</p> <p><i>This conclusion is based on the staff findings that:</i></p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality.

Region 2: San Leandro Bay

Mercury, Lead, Selenium, Zinc, PAHs, DDT, Pesticides

2. The data exhibited sufficient spatial and temporal coverage.
3. Beneficial uses are applicable and apply to this water body.
4. The evaluation guideline used to interpret narrative water quality standards is adequate.
5. Data are numerical.
6. Standard methods were used.

An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 2: San Pablo Reservoir

Mercury

Water Body	San Pablo Reservoir
Stressor/Media/Beneficial Use	Mercury/Water/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	Used California Office of Health Hazard Assessment and Contra Costa County Health Services data. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Mercury linked to fish consumption.
Utility of measure for judging if standards or uses are not attained	Interim fish advisory issued Feb. 2000, USEPA screening criteria (0.3 ppm), WQO.
Water Body-specific Information	Data = 1 month (11/97), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	5 out of 12 composite fish-tissue samples exceed the USEPA criteria. All of the fish were trophic Level 4 samples (large mouth bass). There was also a fish advisory issued in February 2000.
Spatial representation	
Temporal representation	Data was collected during 11/97.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Atmospheric Deposition.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. Beneficial uses have been established. 4. Water quality standard used is applicable. 5. Data are numerical. 7. Standard methods were used. 8. Other water body- or site-specific information including the age of the data were considered.

Region 2: San Pablo Reservoir

Mercury

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 2: San Pedro Creek

High Coliform Count

Water Body	San Pedro Creek
Stressor/Media/Beneficial Use	High Coliform Count/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring/Surfrider data/lab QA/QC used. USEPA Region IX Laboratory data used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	High Coliform Counts are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Basin Plan used.
Water Body-specific Information	Data = 3 years (98-2000), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 99 samples for total coliform, 6 samples for fecal coliform, for Basin Plan data set. 41 samples for total coliform, 23 samples for fecal coliform for Ocean Plan data set. Basin Plan objectives violated in 13% samples for total coliform, 98% samples for total coliform median, and 100% violated for samples of fecal coliform geometric mean and fecal coliform in dry weather months. Ocean Plan objectives violated in 90% of the samples for total coliform, 96% of samples for fecal coliform geometric mean, and 100% fecal coliform in dry weather months. E. coli data show 67% samples for total coliform maximum designated beach violated the Basin Plan Objectives. Basin Plan objectives violated in 63% samples for E. coli maximum moderately-used beach, violated in 57% samples for maximum lightly-used beach and violated in 57% samples for maximum infrequently-used beach, in dry weather months.
Spatial representation	Data was collected at 15 sampling sites.
Temporal representation	Data was collected, from 5/26/98-8/14/00, and 4/24/00-11/13/00.
Data type	Numerical data.
Use of standard method	California Office of Health Hazard Assessment and Contra Costa County Health Services methods.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers, Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Region 2: San Pedro Creek High Coliform Count

This conclusion is based on the staff findings that:

1. The data is considered to be of adequate quality.
2. The data exhibited sufficient spatial and temporal coverage.
3. Beneficial uses apply to the water body.
4. Water quality objective used is applicable.
5. Data are numerical.
6. Standard methods were used.
7. Other water body- or site-specific information including the age of the data were considered.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 2: San Vicente Creek

High Coliform Count

Water Body	San Vicente Creek
Stressor/Media/Beneficial Use	High Coliform Count/Water/REC-1, REC-2
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Department. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	High Coliform Counts linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Basin Plan used.
Water Body-specific Information	Data = 2 years (98-2000), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 38 samples for total coliform, 22 samples for fecal coliform, and 6 samples for E. coli. E. coli data show 100% violations of the Basin Plan Objectives for total coliform maximum at all beaches in dry-weather months. Basin Plan violated in 3% of samples for total coliform maximum, 100% samples violated for total coliform median, 100% samples violated for fecal coliform geomean and 100% samples violated for fecal coliform (REC-1). Basin Plan objectives violated in 32% of samples for fecal coliform mean, and 23% violated samples for fecal coliform (REC-2) in dry-weather months.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected from 10/6/98-9/26/00.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body.

Region 2: San Vicente Creek

High Coliform Count

4. Water quality objective used is applicable.
5. Data are numerical.
6. Standard methods were used.
7. Other water body- or site-specific information including the age of the data were considered.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 2: Stege Marsh

Arsenic, Copper, Mercury, Selenium, Zinc, Chlordane, Dieldrin, ppDDE, +

Water Body	Stege Marsh
Stressor/Media/Beneficial Use	Arsenic, Copper, Mercury, Selenium, Zinc, Chlordane, Dieldrin, ppDDE, Dacthal, Endosulfan 1, Endosulfan sulfate, Dichlorobenzophenone, Heptachlor epoxide, Hexachlorobenzene, Mirex, Oxidiazon, Toxaphene, PCBs/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	The observed sediment toxicity and benthic community effects are linked to aquatic life beneficial uses.
Utility of measure for judging if standards or uses are not attained	Toxicity test results (and ERM quotient) for sediment used.
Water Body-specific Information	Data = 2 months (1997), Data measured at the site, Environmental Conditions considered at site.
Data used to assess water quality	Elevated sediment chemistry (ERM quotient) 0-1% amphipod Survival, 5/5 tests, significant urchin toxicity, 3/3 samples, Relative benthic index = 0.00 (2 benthic samples).
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected from 10/97-12/97.
Data type	Numerical data.
Use of standard method	BPTCP methods.
Potential Source(s) of Pollutant	Industrial Point Sources.
Alternative Enforceable Program	Stege Marsh is identified as a toxic hot spot on the SWRCB Consolidated Toxic Hot Spots Cleanup Plan SWRCB Resolution No. 99-065). This plan is being implemented through Cleanup and Abatement Orders.
RWQCB Recommendation	List: Current application of other regulatory authorities and the effects-based nature of the listing would give this listing a low-priority.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program is addressing the problem.</p> <p>The water quality problem is being addressed by implementation of the Consolidated Toxic Hot Spots Cleanup Plan using Cleanup and Abatement Orders.</p>

Region 2: Tomales Bay

Mercury

Water Body	Tomales Bay
Stressor/Media/Beneficial Use	Mercury/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Mercury linked to Aquatic life.
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	Data was spatially collected.
Temporal representation	Data was temporally collected.
Data type	Numerical data.
Use of standard method	N/A
Potential Source(s) of Pollutant	Mine Tailings.
Alternative Enforceable Program	N/A
RWQCB Recommendation	Change in listed water body. Change pollutant from Metals to Mercury.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body pollutant should be changed in this already listed water body. Change pollutant from Metals to Mercury.

Region 2: Walker Creek Mercury

Water Body	Walker Creek
Stressor/Media/Beneficial Use	Mercury/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA/QC requirement. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Mercury linked to Aquatic life.
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	Data was spatially collected.
Temporal representation	Data was temporally collected.
Data type	Numerical data
Use of standard method	N/A
Potential Source(s) of Pollutant	Surface Mining, Mine Tailings
Alternative Enforceable Program	N/A
RWQCB Recommendation	Change in listed water body. Change pollutant from metals to mercury.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body pollutant should be changed in this already listed water body. Change pollutant from metals to mercury.

Page left blank intentionally.

Water Bodies Proposed for the Monitoring List in Region 2

Water Body	Pollutant/Stressor	Rationale
Carquinez Strait		
	Copper	Data = 466 samples total collectively for S.F. Bay segments North of the Dumbarton Bridge. Since March 1993, there have been 6 exceedances, and there have been no exceedances of the objective since 1997.
	Nickel	Data = 463 samples total collectively for S.F. Bay segments North of the Dumbarton Bridge. Using the CTR standard, there have been no exceedances since March of 1993.
	PAHs, PBDEs	<p>For PAHs: Did not exceed threshold concentrations for adverse effects to fish embryos. Occasional exceedances of the human health criteria in ambient samples, evidence of increasing shellfish concentrations, and preponderance of PAHs at toxic sites warrant increased assessment activities for PAHs by dischargers and cities around the region. RMP resources will be expected to better assess PAH impacts in the estuary, since the current spatial and temporal coverage does not address areas near the shoreline that may be greater impacted by PAHs in discharges of urban runoff and other sources.</p> <p>For PBDEs: No available WQ objective or evaluation guideline. PBDEs research literature will be reviewed by the RWQCB to ascertain any new information on actual effects thresholds for these persistent bioaccumulative substances in the next listing cycle. These actions can be conducted regionally through the RMP, the Bay Area Pollution Prevention Group, or other association of dischargers. During the subsequent listing cycle, RWQCB staff evaluation of current research, applicable water quality criteria, and local actions to characterize sources and pollution prevention of PBDEs will determine whether a listing is needed.</p>
Lake Merced		
	Low Dissolved Oxygen	<p>5/14 (36%) Dissolved Oxygen violations at East Lake, 64% Dissolved Oxygen violations, South Police Range, 57% Dissolved Oxygen violations, South Pump Station, 93% Dissolved Oxygen violations, North Lake, 57% Dissolved Oxygen violations, East Lake, 5/14 (36%) violations of pH (>8.5) at North Lake.</p> <p>Because DO and pH are such dynamic parameters in this water body, the spatial and temporal coverage of this study is not adequate to assess impairment. RWQCB staff recommends that DO and pH be monitored systematically by a public agency such as the SFWD, the San Francisco Public Utilities Commission, or other stakeholder. This monitoring should be conducted at the same sites as the SFWD program plus additional sites within the different portions of the lake, and more frequently than before, continuously where resources allow, to assess whether the lake is truly impaired due to lack of DO or elevated pH. In the next listing cycle the RWQCB will re-evaluate DO and pH information, including the 1997-2000 data, and will make a determination for DO and pH listings.</p>

Water Body	Pollutant/Stressor	Rationale
Lake Merritt	Low Dissolved Oxygen	<p>In 1998, the USEPA listed Lake Merritt as impaired by low dissolved oxygen (D.O.) and organic enrichment. The original data used by USEPA to recommend listing does not meet quality and quantity requirements necessary to support 303(d) listing, specified in USEPA guidance. No assessment methodology for organic enrichment was followed, and the organic matter discharged to the lake would probably be better characterized as a source of potential D.O. impairment. Statewide the 303(d) list couples low D.O. with organic enrichment. Information submitted to the RWQCB during the public solicitation provided anecdotal-level information that D.O. levels may be inadequate to support beneficial uses, especially when the tide gates are closed by the Alameda County 303(d) Staff Report San Francisco Bay Regional Water Quality Control Board Flood Control District (ACFCD), but the study design did not document surface D.O. levels, particularly pre-dawn levels, which provide the necessary estimator of D.O. to support beneficial uses. No evidence of beneficial use impairment, such as number and frequency of fish kills, has been submitted. A quick review of 1997-98 surface D.O. data from the county indicates that the Basin Plan standard is met, but specific time-of-day information for this data is not available, and therefore this review is inconclusive.</p> <p>Because of community concern and anecdotal evidence of continued impairment, RWQCB staff does not recommend de-listing at this time, but recommends that D.O. be monitored systematically by a public agency such as the ACFCD, City of Oakland, Alameda County Public Works Agency, or other stakeholder. This monitoring should be conducted at a minimum at the same sites as studies submitted by the Lake Merritt Institute, but more frequently than before, continuously where resources allow, to assess whether the lake is truly impacted due to lack of D.O.</p>
Lakes and Shorelines of San Francisco Bay Region	Trash	<p>Volunteers have documented trash removal from the Lake Merritt but other lakes and shoreline conditions are unknown. More data and information are needed documenting in space and time the abundance and amount of trash and debris in lakes and along the shoreline.</p>
Novato Creek below Stafford Dam	Sedimentation and Siltation	<p>The two sediment reports have resulted from conditions of 401 certifications granted by the RWQCB for dredging permits in lower Novato Creek. Because there is a sediment management planning process underway required by regulatory action, RWQCB staff believes that the water quality standard may be implemented within the next listing 303(d) Staff Report San Francisco Bay Regional Water Quality Control Board cycle. Also, the sediment control plan recommends identifying areas of potential and existing salmonid spawning habitat and will better link the effects of sediment input from in-stream (the major source) and hillslope sources on beneficial uses. The RWQCB recommends that sediment threatens to impair water quality in Novato Creek. In the next listing cycle, the RWQCB will evaluate the planned sediment management and salmonid habitat identification efforts and an impairment listing will be determined. If the sediment control plan is not implemented, then the impairment listing may be triggered.</p>
Pacific Ocean at Baker Beach	High Coliform Count	<p>Data = 164 samples total. Ocean Plan objectives violated in 9.7% of the samples for total coliform in dry-weather months. Combined sewer overflow events are not considered because all CSOs in the vicinity have been directed away from Lobos Creek drainage onto Baker Beach.</p>
Pacific Ocean at San Gregorio Beach	High Coliform Count	<p>Data = 56 samples for total coliform, 23 samples for fecal coliform. Ocean Plan objectives violated in 5% of samples for total coliform in combined dry- and wet-weather months. Ocean Plan objectives violated in 8% samples for fecal coliform, wet-weather only. No exceedances between May and October. Listing driven by wet weather exceedances.</p>

Water Body	Pollutant/Stressor	Rationale
Pacific Ocean at Surfer's Beach	Total Coliform	Data = 134 total coliform samples, 126 fecal coliform samples. Ocean Plan objectives violated in 5% samples for total coliform in combined dry-weather and wet-weather months. Ocean Plan objectives violated in 9% of samples for fecal coliform in combined wet-dry weather. No exceedances between May and October. Listing driven by wet weather only.
Pilarcitos Creek below Pilarcitos Reservoir	Sedimentation and Siltation	Turbidity monitoring has not been conducted in Pilarcitos Creek so it is not possible, at this time, to determine whether a problem exists in Pilarcitos Creek. Pilarcitos Creek should be placed on the Monitoring List because: (1) there is a clear linkage between sediment and degradation of habitat for steelhead in this watershed; (2) it remains to be determined whether human activities are an important factor; and (3) there is an active watershed restoration program, the Pilarcitos Creek Watershed Advisory Committee (PCWAC), that has broad stakeholder participation and support. The sources of fine sediment are not adequately characterized to support a 303(d) listing at this time.
Redwood Creek, tidal portion (San Mateo County)	High Coliform Count	The data was from one year from one season with only 12 samples. The data showed 4 of 12 samples exceed the objective. The available data and information are inadequate to draw a conclusion. More monitoring is needed to determine if listing is necessary.
Richardson Bay	PAHs, PBDEs	<p>For PAHs: Did not exceed threshold concentrations for adverse effects to fish embryos, For PBDEs: No available WQ criterion/objective. Occasional exceedances of the human health criteria in ambient samples, evidence of increasing shellfish concentrations, and preponderance of PAHs at toxic sites warrant increased assessment activities for PAHs by dischargers and cities around the region. RMP resources will be expected to better assess PAH impacts in the estuary, since the current spatial and temporal coverage does not address areas near the shoreline that may be greater impacted by PAHs in discharges of urban runoff and other sources.</p> <p>PBDEs research literature will be reviewed by the RWQCB to ascertain any new information on actual effects thresholds for these persistent bioaccumulative substances in the next listing cycle. These actions can be conducted regionally through the RMP, the Bay Area Pollution Prevention Group, or other association of dischargers. During the subsequent listing cycle, RWQCB staff evaluation of current research, applicable water quality criteria, and local actions to characterize sources and pollution prevention of PBDEs will determine whether a listing is needed.</p>
Sacramento-San Joaquin Delta	Copper	Data = 466 samples total collectively for S.F. Bay segments North of the Dumbarton Bridge. Since March 1993, there have been 6 exceedances, and there have been no exceedances of the objective since 1997.
	Nickel	Data = 463 samples total collected for S.F. Bay segments North of the Dumbarton Bridge. Using the CTR standard, there have been no exceedances since March of 1993.

Water Body	Pollutant/Stressor	Rationale
San Francisco Bay, Central	PAHs, PBDEs	<p>For PAHs: Did not exceed threshold concentrations for adverse effects to fish embryos. For PBDEs: No available WQ criterion/objective. Occasional exceedances of the human health criteria in ambient samples, evidence of increasing shellfish concentrations, and preponderance of PAHs at toxic sites warrant increased assessment activities for PAHs by dischargers and cities around the region. RMP resources will be expected to better assess PAH impacts in the estuary, since the current spatial and temporal coverage does not address areas near the shoreline that may be greater impacted by PAHs in discharges of urban runoff and other sources.</p> <p>PBDEs research literature will be reviewed by the RWQCB to ascertain any new information on actual effects thresholds for these persistent bioaccumulative substances in the next listing cycle. These actions can be conducted regionally through the RMP, the Bay Area Pollution Prevention Group, or other association of dischargers. During the subsequent listing cycle, RWQCB staff evaluation of current research, applicable water quality criteria, and local actions to characterize sources and pollution prevention of PBDEs will determine whether a listing is needed.</p>
	Copper	Data = 466 samples total collectively for S.F. Bay segments North of the Dumbarton Bridge. Since March 1993, there have been 6 exceedances, and there have been no exceedances of the objective since 1997.
	PAHs, PBDEs	<p>For PAHs: Did not exceed threshold concentrations for adverse effects to fish embryos. For PBDEs: No available WQ criterion/objective. Occasional exceedances of the human health criteria in ambient samples, evidence of increasing shellfish concentrations, and preponderance of PAHs at toxic sites warrant increased assessment activities for PAHs by dischargers and cities around the region. RMP resources will be expected to better assess PAH impacts in the estuary, since the current spatial and temporal coverage does not address areas near the shoreline that may be greater impacted by PAHs in discharges of urban runoff and other sources.</p> <p>PBDEs research literature will be reviewed by the RWQCB to ascertain any new information on actual effects thresholds for these persistent bioaccumulative substances in the next listing cycle. These actions can be conducted regionally through the RMP, the Bay Area Pollution Prevention Group, or other association of dischargers. During the subsequent listing cycle, RWQCB staff evaluation of current research, applicable water quality criteria, and local actions to characterize sources and pollution prevention of PBDEs will determine whether a listing is needed.</p>
San Francisco Bay, Lower	Copper	Data = 466 samples total collected for S.F. Bay segments North of the Dumbarton Bridge. Since March 1993, there have been 6 exceedances, and there have been no exceedances of the objective since 1997.
	Nickel	Data = 463 samples total collected for S.F. Bay segments North of the Dumbarton Bridge. Using the CTR standard, there have been no exceedances since March of 1993.
	PAHs, PBDEs	<p>For PAHs: Did not exceed threshold concentrations for adverse effects to fish embryos. For PBDEs: No available WQ criterion/objective. Occasional exceedances of the human health criteria in ambient samples, evidence of increasing shellfish concentrations, and preponderance of PAHs at toxic sites warrant increased assessment activities for PAHs by dischargers and cities around the region. RMP resources will be expected to better assess PAH impacts in the estuary, since the current spatial and temporal coverage does not address areas near the shoreline that may be greater impacted by PAHs in discharges of urban runoff and other sources.</p> <p>PBDEs research literature will be reviewed by the RWQCB to ascertain any new information on actual effects thresholds for these persistent bioaccumulative substances in the next listing cycle. These actions can be conducted regionally through the RMP, the Bay Area Pollution Prevention Group, or other association of dischargers. During the subsequent listing cycle, RWQCB staff evaluation of current research, applicable water quality criteria, and local actions to characterize sources and pollution prevention of PBDEs will determine whether a listing is needed.</p>

Water Body	Pollutant/Stressor	Rationale
San Francisco Bay, South		
	Copper	Data = 690 samples total collected for S.F. Bay south of the Dumbarton Bridge. Available ambient dissolved copper concentrations in the estuary never exceed the most conservative WER-based objectives. For example, out of 50 WERs recently generated based on USEPA guidance if the lowest 5th percentile WER of 1.7 were used, the CTR marine chronic objective for dissolved copper would be 5.3 ug/l, which has not been exceeded in 466 samples in the San Francisco Estuary since the Regional Monitoring Program began in 1993.
	Nickel	Data = 604 samples total collected for S.F. Bay south of the Dumbarton Bridge. Using the CTR standard, 1% (6) of the samples exceed it.
	PAHs, PBDEs	For PAHs: Did not exceed threshold concentrations for adverse effects to fish embryos. For PBDEs: No available WQ criterion/objective. Occasional exceedances of the human health criteria in ambient samples, evidence of increasing shellfish concentrations, and preponderance of PAHs at toxic sites warrant increased assessment activities for PAHs by dischargers and cities around the region. RMP resources will be expected to better assess PAH impacts in the estuary, since the current spatial and temporal coverage does not address areas near the shoreline that may be greater impacted by PAHs in discharges of urban runoff and other sources. PBDEs research literature will be reviewed by the RWQCB to ascertain any new information on actual effects thresholds for these persistent bioaccumulative substances in the next listing cycle. These actions can be conducted regionally through the RMP, the Bay Area Pollution Prevention Group, or other association of dischargers. During the subsequent listing cycle, RWQCB staff evaluation of current research, applicable water quality criteria, and local actions to characterize sources and pollution prevention of PBDEs will determine whether a listing is needed.
San Pablo Bay		
	Copper	Data = 466 samples total collectively for S.F. Bay segments North of the Dumbarton Bridge. Since March 1993, there have been 6 exceedances, and there have been no exceedances of the objective since 1997.
	Nickel	Data = 463 samples total collected for S.F. Bay segments North of the Dumbarton Bridge. Using the CTR standard, there have been no exceedances since March of 1993.
	PAHs, PBDEs	For PAHs: Did not exceed threshold concentrations for adverse effects to fish embryos. For PBDEs: No available WQ criterion/objective. Occasional exceedances of the human health criteria in ambient samples, evidence of increasing shellfish concentrations, and preponderance of PAHs at toxic sites warrant increased assessment activities for PAHs by dischargers and cities around the region. RMP resources will be expected to better assess PAH impacts in the estuary, since the current spatial and temporal coverage does not address areas near the shoreline that may be greater impacted by PAHs in discharges of urban runoff and other sources. PBDEs research literature will be reviewed by the RWQCB to ascertain any new information on actual effects thresholds for these persistent bioaccumulative substances in the next listing cycle. These actions can be conducted regionally through the RMP, the Bay Area Pollution Prevention Group, or other association of dischargers. During the subsequent listing cycle, RWQCB staff evaluation of current research, applicable water quality criteria, and local actions to characterize sources and pollution prevention of PBDEs will determine whether a listing is needed.
Suisun Bay		
	Copper	Data = 466 samples total collectively for S.F. Bay segments North of the Dumbarton Bridge. Since March 1993, there have been 6 exceedances, and there have been no exceedances of the objective since 1997.
	Nickel	Data = 463 samples total collectively for S.F. Bay segments North of the Dumbarton Bridge. Using the CTR standard, there have been no exceedances since March of 1993.

Water Body	Pollutant/Stressor	Rationale
Urban Creeks of San Francisco Bay Region	PAHs, PBDEs	<p>For PAHs: Did not exceed threshold concentrations for adverse effects to fish embryos. For PBDEs: No available WQ criterion/objective. Occasional exceedances of the human health criteria in ambient samples, evidence of increasing shellfish concentrations, and preponderance of PAHs at toxic sites warrant increased assessment activities for PAHs by dischargers and cities around the region. RMP resources will be expected to better assess PAH impacts in the estuary, since the current spatial and temporal coverage does not address areas near the shoreline that may be greater impacted by PAHs in discharges of urban runoff and other sources.</p> <p>PBDEs research literature will be reviewed by the RWQCB to ascertain any new information on actual effects thresholds for these persistent bioaccumulative substances in the next listing cycle. These actions can be conducted regionally through the RMP, the Bay Area Pollution Prevention Group, or other association of dischargers. During the subsequent listing cycle, RWQCB staff evaluation of current research, applicable water quality criteria, and local actions to characterize sources and pollution prevention of PBDEs will determine whether a listing is needed.</p>
	Trash	<p>More data and information are needed documenting in space and time the abundance and amount of trash and debris in urban creeks of the San Francisco Bay Region.</p> <p>Guadalupe River: Thirty-four photographs were submitted depicting what appeared to be locations along the River. The trash included plastic bottles, styrofoam cups, paper wrappers, wood debris, and other unidentifiable debris.</p> <p>San Leandro Creek: Six photographs were submitted depicting what appeared to be locations along the Creek. The trash included accumulations of plastic bottles, styrofoam cups, paper wrappers, wood debris, shopping carts, aluminum cans, and other unidentifiable debris.</p> <p>Damon Slough: Six photographs were submitted depicting what appeared to be locations along the Slough. The trash included accumulations of plastic bottles, styrofoam cups, paper wrappers, wood debris, shopping carts, aluminum cans, and other unidentifiable debris.</p> <p>Glen Echo Creek: Two photographs were submitted depicting what appeared to be locations along the Creek. The trash included accumulations of plastic, styrofoam cups, paper wrappers, wood debris, shopping carts, and other unidentifiable debris.</p>

Reference List for Region 2

Staff Report

California Regional Water Quality Control Board. San Francisco Bay Region. 2001. Proposed Revisions to Section 303(d) List and Priorities for Development of Total Maximum Daily Loads (TMDLs) for the San Francisco Bay Region. Staff Report. November 14, 2001.

Technical References

Alameda Creek Watershed Key Point Monitoring for Alameda Creek, Alameda Creek Water Quality Monitoring Station, Alamo Canal, Arroyo de la Laguna, Arroyo del Valle, Arroyo las Positas, Arroyo Mocho, Sinbad, Stonybrook, and Vallecitos Creek. Jul. 1997-Apr. 2001. Alameda County Water District.

Alameda Creek Watershed Key Point Monitoring for Alamo Creek, South San Ramon Creek, and Tassajara Creek. May 1998-Apr. 2001. Alameda County Water District.

Anderson, J.W., Zeng, E.y., Jones, J.M., 1999. Environ. Toxicol. Chem. 1999, 18, 1506-1510.

Bay Area Clean Water Agencies (BACWA), 2001. Draft Report for Copper and Nickel North of the Dumbarton Bridge. Prepared by EOA, Inc. and Larry Walker Associates, December 6, 2001.

Bel Marin Keys Community Services District Water Quality Testing Results 1997-1998; 2000-2001 Novato Creek and Bel Marin Keys Lagoon, Novato, California.

Belsky, E. and S. Lattanzio. Feb 2001. Request for Assessment and Clean-Up at Pacheco pond. Waterkeepers Northern California.

BPTCP, 1998. Sediment Quality and Biological Effects in San Francisco Bay. Bay Protection and Toxic Cleanup Program. Final Technical Report. California State Water Resources Control Board, Division of Water Quality, San Francisco Bay Regional Water Quality Control Board, California Department of Fish and Game Marine Pollution Studies Laboratory, California State University Moss Landing Marine Laboratories, University of California, Santa Cruz, Institute of Marine Sciences. August 1998.

Cabral, B. Water Quality Project Manager. Watershed Sanitary Survey for the CA Water Service Company. Bear Gulch Water Treatment Facility. CA Water Service Company.

California Department of Pesticide Regulation, Surface Water Database. Sept. 24, 2000. Pesticide Action Network.

City of Benicia Monitoring Program for Lake Herman. Jul. 1997-Apr. 2001. City of Benicia.

Cloak D. and L.A.J. Buchan. Sept. 2000. Stormwater Environmental Indicators Demonstration Project Draft Report. Water Environment research Foundation.

Coastal Clean-up Data for Alameda and Contra Costa East Bay Regional Park District. 1998-2000. Kathleen Fusek. Alameda and Contra Costa East Bay Regional Park District

Coastal Clean-up Data for Marin County. 1997-2000. Christianne Gallagher. Marin Bay Model Visitor Center.

Coastal Clean-up Data for Sonoma County. 1997-2000. Christie Brown. Sonoma-Sierra.

Collins, L. Jul. 1998. Sediment Sources and Fluvial Geomorphic Processes of Lower Novato Creek Watershed.

Collins, L., D. Morton, and P. Amato. 2001. Carriger Creek Watershed Science Approach, San Francisco estuary Institute Draft.

Collins, L., P. Amato, and D. Morton. Dec. 2000. Application of the SFEI Watershed Science Approach to San Antonio Creek, Sonoma and Marin Counties, California.

Collins, L., P. Amato, and D. Morton. 2001. San Pedro Creek Geomorphic Analysis. San Mateo County.

Department of Water Resources. 1999. Assessment of MTBE in State Water Project Reservoirs. Apr. 1999.

Draft Environmental Impact Report and Stream Maintenance Program Report for the Multi-Year Stream Maintenance Program. Mar. 28, 2001. Santa Clara County, Santa Clara Valley Water District.

- Draft IR Site 2 Remedial Investigation Report Alameda Point Alameda, California. Dec 2000. Neptune and Company, Inc.
- Draft Seaplane Lagoon Site Characterization Memorandum. April 2001. WaterKeepers of Northern California.
- Eljarrat, E., J. Caixach and J. Rivera. 2001. Toxic Potency Assessment of Non- and Mono-*ortho* PCBs, PCDDs, PCDFs, and PAHs in Northwest Mediterranean Sediments (Catalonia, Spain). *Env. Sci. Tech.* 35:18 3589-3594.
- Environmental Protection Agency Region IX Laboratory Data for San Pedro Creek. Jan. 1997-Nov. 2000. Environmental Protection Agency.
- Fairfield-Suisun Water Treatment Plant Slough Data for Suisun Slough and Boynton Slough. Jun. 1997-Jun. 2000. NPDES Permit CA0038024. Fairfield-Suisun Sewer District.
- Fairfield-Suisun Sewer District. 2001. Mercury Reduction Study-Final Report. July 10, 2001. NPDES Permit CA0038024.
- Friends of Novato Creek Photo Journal. Friends of Novato Creek.
- Friends of Sausal Creek Monitoring Program for Palo Seco, El Centro, and Hickory. Feb. 1998-Mar. 2000. Friends of Sausal Creek.
- Grovhoug, T. R. and S. Salvia. Aug. 17, 2000. Work Plan for Copper and Nickel Impairment Assessment to Assist in Preparation of 2002 303(d) List-San Francisco Bay North of Dumbarton Bridge. Bay Area Clean Water Agencies (BACWA).
- Haible, W.W., 1980. Holocene profile changes along a California coastal stream. *Earth Surface Processes* 5(3): 249-264.
- Hecht, B., 1992. Sediment overview report: development of an initial sediment management plan for Lagunitas Creek, Marin County, California> Prepared for Marin Municipal Water District by Balance Hydrologics, Inc., February 1992.
- Kannan, K., Villeneuve, D., Yamashita, N., Imagawa, T., Hashimoto, S., Miyazaki, A., Giesy, J. 2000. *Environ. Sci. Tech.* 2000, 34, 3568-3573.
- Khim, J.S.; Villeneuve, D.L., Kannan, K., Koh, C., Giesy, G. 1999. *Environ. Sci. Tech.* 1999, 33, 4206-4211.
- Lake Merritt Institute Monitoring Program. Sept. 1998-May 1999. Lake Merritt Institute, Alameda County.
- Lawrence Livermore National Laboratory Storm Water Monitoring Program for Arroyo Seco and Arroyo Los Positas. Nov. 1997-Mar. 2000. Lawrence Livermore National Laboratory.
- Leidy, Robert, 1997. Distribution and ecology of stream fishes in the San Francisco Bay drainage. *Hilgardia* 52, no. 8:1-175.
- Marin County Macroinvertebrate Survey Fall 1999-Spring 2000. Sustainable Land Stewardship Institute for the Marin County Stormwater Pollution Prevention Program.
- Marin County Stormwater Pollution Prevention Program's Aquatic Macroinvertebrate Sampling Program. World Wide Web. <http://www.mywatershed.org/bmi/samplesites.htm>. Apr. 2001.
- Marin-Sonoma Counties Agricultural Runoff Influence Investigation 1999-2000 Summary. Dec 2000. Department of Fish and Game.
- McMurtry, R. Jan. 2001. PCBs and Clams in Creeks The Results of An Environmental Partnership. Silicon Valley Toxics Coalition, Clean Streams/Clean Bay Project.
- Moore, C.J. et al. 1999. Marine Debris in the North Pacific Gyre, with a Biomass Comparison of Neustonic Plastic and Plankton. (in preparation).
- Moore, S.L. and M.J. Allen. 2000. Distribution of Anthropogenic and Natural Debris on the Mainland Shelf of the Southern California Bight. *Marine Pollution Bulletin* 40:83-88.
- National Research Council (NRC), 2001. Assessing the TMDL Approach to Water Quality Management. Committee to Assess the Scientific Basis of the Total Maximum Daily Load Approach to Water Pollution Reduction. Water Science and Technology Board. Division of Earth and Life Studies. Governing Board of the National Research Council, with members of the National Academy of Sciences, National Academy of Engineering, and the Institute of Medicine.
- Natural Resources Defense Council (NRDC), 2001. Testing the Waters XI: A Guide to Water Quality at Vacation Beaches. August 2001.

North Bay Dischargers Group, Bay Area Dischargers Association, Western States Petroleum Association. 2001. Copper and Nickel Impairment Assessment to Assist in Preparation of 2002 303(d) List, San Francisco Bay North of Dumbarton Bridge. May 15, 2001.

Pereira, W. E., F. D. Hostettler, S. N. Luoma, Alexander van Geen, C. C. Fuller, and R. J. Anima. 1999. Sedimentary record of anthropogenic and biogenic polycyclic aromatic hydrocarbons in San Francisco Bay, California. *Marine Chemistry*. 64:99-113.

Petaluma Tree Planters, 1999. Diazinon and Chlorpyrifos in the Upper Petaluma River Watershed Petaluma, California. B. Abelli-Amen, BASELINE Environmental Consulting.

Phillip Williams & Associates, Ltd. 1996. Pilarcitos Creek Restoration Plan. Aug. 1996.

Prunuske Chatham, Inc., 2001. Novato Creek Watershed Erosion Inventory and Sediment Control Plan. Prepared for Marin County Department of Public Works, April 2001.

Randall, Paul. 2001. Response to Recommendation by WaterKeepers of Northern California that San Pedro Creek be added to the 303(d) List for Total Coliform, Fecal Coliform, and Sedimentation. Memorandum to Bob Davidson, San Mateo STOPPP. June 27, 2001.

Rich, A. May. 1995. Feasibility Study to Rehabilitate the Fishery Resources of the Arroyo Corte Madera del Presidio Watershed, Mill Valley, California. A.A Rich and Associates Fisheries and Ecological Consultants.

Rich, A. Nov. 2000. Fishery Resources Conditions of the Corte Madera Creek Watershed, Marin County, California.

RWQCB, 1995. San Francisco Bay Water Quality Control Plan (Basin Plan).

RWQCB, 1999. Final Regional Toxic Hot Spot Cleanup Plan. March 1999.

San Francisco Public Utilities Commission Quarterly Lake Monitoring. Sept. 1997-Dec. 2000. Friends of Lake Merced, San Francisco Public Utilities Commission.

San Jose Copper and Nickel Monitoring Program. Feb. 1997-Dec. 2000.

Sanitary Survey Update Report 2001, Vol. 1,2. Municipal Water Quality Investigations Program. California State Water Project Watershed. Division of Planning and Local Assistance, CA Department of Water Resources.

San Mateo County Environmental Health Data for Marina Lagoon. Oct. 1998-Oct. 2000. WaterKeepers of Northern California.

San Mateo County Environmental Health Data for North Coast: Fitzgerald Marine Reserve, Linda Mar Beach #5, Linda Mar Beach #6, Pillar Point Harbor, Sharp Park Beach #3, and Sharp Park Beach #6. Jan. 1998-Jan. 2001. WaterKeepers of Northern California.

San Mateo County Environmental Health Data for North Coast: Montara Beach. Feb. 2000-Jan. 2000. WaterKeepers of Northern California.

San Mateo County Environmental Health Data for North Coast: Pillar Point #4, #5, and #7. Jan. 2000-Jan. 2001. WaterKeepers of Northern California.

San Mateo County Environmental Health Data for North Coast: Rockaway Beach. Mar. 2000-Jan. 2001. WaterKeepers of Northern California.

San Mateo County Environmental Health Data for North Coast: Surfer's Beach. Jan. 1998-Jan. 2001. WaterKeepers of Northern California.

San Mateo County Environmental Health Data for San Pedro. May. 1998-Aug. 2000. WaterKeepers of Northern California.

San Mateo County Environmental Health Data for San Vicente. Oct. 1998-Sept. 2000. WaterKeepers of Northern California.

San Mateo County Environmental Health Data for South Coast: Francis Beach, Pescadero Beach, Pomponio Beach, Pomponio Creek, San Gregorio Beach, and San Gregorio Creek. Sept. 1998-Mar. 2001. WaterKeepers of Northern California.

San Mateo County Environmental Health Data for South Coast: Pescadero Creek. Sept. 2000-Oct. 2000. WaterKeepers of Northern California.

San Mateo County Environmental Health Data for South Coast: Roosevelt Beach. Sept. 1998-Mar. 2001. WaterKeepers of Northern California.

- San Mateo County Environmental Health Data for South Coast: Venice Beach. Sept.1999-Mar. 2001. WaterKeepers of Northern California.
- Santa Clara Basin Watershed Management Initiative TMDL Work Group, 2000. Impairment Assessment Report for Copper and Nickel in Lower South San Francisco Bay. June 2000.
- Santa Clara Basin Watershed Management Initiative TMDL Work Group, 1999. Conceptual Model Report for Copper and Nickel in Lower South San Francisco Bay, December 1999.
- Santa Clara Watershed Monitoring for Almaden Reservoir. Jan.1998-Feb.2000. Santa Clara Valley Water District.
- Santa Clara Watershed Monitoring for Anderson EROP Packwood, EROP North, EROP South, and EROP Holiday Estates. Jul.1997-Dec.2000. Santa Clara Valley Water District.
- Santa Clara Watershed Monitoring for Anderson Reservoir. Jan.1998-Feb.2000. Santa Clara Valley Water District.
- Santa Clara Watershed Monitoring for Anderson Reservoir Basin. Feb.1998-Jun.2000. Santa Clara Valley Water District.
- Santa Clara Watershed Monitoring for Calero EROP Beach, EROP Cherry Cove, and EROP Portal. Jul.1997-Aug.2000. Santa Clara Valley Water District.
- Santa Clara Watershed Monitoring for Calero Horse Ranch and Calero Inlet. Jul.1997-Aug. 2000. Santa Clara Valley Water District.
- Santa Clara Watershed Monitoring for Calero Reservoir Basin. Feb.1998-May.2000. Santa Clara Valley Water District.
- Santa Clara Watershed Monitoring for Coyote Reservoir. Jan.1998-Feb.2000. Santa Clara Valley Water District.
- Santa Clara Watershed Monitoring for Horse Ranch Monitoring Program and Lightfoot Stable Monitoring Program. Jan.1998-Jan.2000. Santa Clara Valley Water District.
- Santa Clara Watershed Monitoring for Hydrolab Anderson. Jul.1997-Jun.2001. Santa Clara Valley Water District.
- Santa Clara Watershed Monitoring for Hydrolab Calero. Jan.2000-Dec.2000. Santa Clara Valley Water District.
- Santa Clara Watershed Monitoring for Twin Creeks Monitoring Program. Jul.1997-Oct.2000. Santa Clara Valley Water District.
- Scanlin, J. and A. Y. Feng. Oct. 20, 1997. Characterization of the Presence and Sources of Diazinon in the Castro Valley Creek Watershed. Alameda County.
- San Francisco Estuary Institute. 2000. Sediment Contamination in San Leandro Bay, CA. Dec. 2000.
- San Francisco Estuary Institute, 2001. Letter and attached information from Rainer Hoenicke to Thomas Mumley re: 303(d) List, May 15, 2001.
- She, J., Petreas, M., Winkler, J., Visita, P., McKinney, M., and D. Kopeck. 2001. PBDEs in the San Francisco Bay Area: Measurements in Harbor Seal Blubber and Human Breast Adipose Tissue. *Chemosphere*, In Press, 2001.
- Smeltzer, M., J. Reilly, and D. Dawdy. Dec. 2000. Geomorphic Assessment of the Corte Madera Creek Watershed Marin County, California Final Report. Stetson Engineers Inc.
- Southern Sonoma County Resource Conservation District, 1999. Petaluma River Enhancement Plan.
- Spies, R. B., and D. W. Rice, Jr. 1988. Effects of organic contaminants on reproduction of the starry flounder *Platichthys stellatus* in San Francisco Bay [California, USA]: II. Reproductive success of fish captured in San Francisco Bay and spawned in the laboratory. *Marine Biology* (Berlin). 98:191-200.
- Sykes, R.G. 2000. East Bay Watershed Sanitary Survey. East Bay Municipal Utility District.
- Stafford Lake Watershed Sanitary Survey. 1995. North Marin Water District.
- Thompson, B., B. Anderson, J. Junt, K. Taberski, and B. Phillips. 1999. Relationships between sediment contamination and toxicity in San Francisco Bay. *Marine Environmental Research*. 48:285-309.
- U.S. Environmental Protection Agency, 1992. Plastic Pellets in the Aquatic Environment: Sources and Recommendations.
- U.S. Environmental Protection Agency, 1996. Guidelines for Preparation of the 1996 State Water Quality Assessments (305(b) Reports).

U.S. Environmental Protection Agency. 2000. Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; (40 CFR Part 131); Part II. In: Federal Register, May 18, 2000. (California Toxics Rule). U.S. EPA. Washington, D.C.

U.S. Environmental Protection Agency, 2001a. DRAFT Consolidated Assessment and Listing Methodology (CALM), Toward a Compendium of Best Practices. April 20, 2001.

U.S. Environmental Protection Agency, 2001b. Draft Assessing and Monitoring Floatable Debris.

U.S. Geological Survey Water Quality Monitoring for Abbotts Lagoon Lower, Middle and Upper. Nov.1998-Aug.1999. U.S. Geological Survey.

U.S. Geological Survey Water Quality Monitoring for Alameda Creek. Feb.2000-May.2000. U.S. Geological Survey.

U.S. Geological Survey Water Quality Monitoring for Arroyo de la Laguna. Dec.1997-Mar.2000. U.S. Geological Survey.

U.S. Geological Survey Water Quality Monitoring for Arroyo Valle. Jan.1999-Mar.2000. U.S. Geological Survey.

U.S. Geological Survey Water Quality Monitoring for Cull Creek and San Lorenzo Creek. Nov. 1997-May.2000. U.S. Geological Survey.

U.S. Geological Survey Water Quality Monitoring for Crow Creek. Oct.1999-May.2000. U.S. Geological Survey.

U.S. Geological Survey Water Quality Monitoring for Lagunitas Creek, Olema Creek, Pine Creek, and Redwood Creek (Alameda County). Nov.1998-Jan.2001. U.S. Geological Survey.

U.S. Geological Survey Water Quality Monitoring for Lobos Creek. Jul.1997-May.1998. U.S. Geological Survey.

U.S. Geological Survey Water Quality Monitoring for Redwood Creek (Marin County). Sept. 1997-Mar.1998. U.S. Geological Survey.

U.S. Geological Survey Water Quality Monitoring for San Antonio Creek. Jan.2000-Apr.2000. U.S. Geological Survey.

U.S. Geological Survey Water Quality Monitoring for Torogas Creek. Jan.2000-May.000. U.S. Geological Survey.

Watershed Sanitary Survey. Jan.1996. Citizens Utilities Company of California Montara District.

Watershed Sanitary Survey 1997. Jan. 1997. Inverness Public Utility District, Marin County.

Watershed Sanitary Survey for Anderson, Coyote, Calero, Almaden 1989. Dec.1995. Santa Clara Valley Water District.

Watershed Sanitary Survey for Denniston and San Vicente Watersheds. Apr.1996. San Mateo Cuntly and Coast Side County Water District.

Watershed Sanitary Survey for Los Gatos and Saratoga Creek Watersheds. San Jose Water Company.

Watershed Sanitary Survey Update. Dec.2000. Citizens Water Resources Company Montara System.

Watershed Sanitary Survey Update 2000. Dec. 2000. Marin Municipal Water District, Kennedy Jenks Consultant.

Watershed Sanitary Survey Updates for the Alameda and Peninsula Watersheds. Dec.2000. Executive Summary. San Francisco Public Utilities Commission.

WaterKeepers of Northern California. Jan.-Apr. 2001. Photographs of trash in Guadalupe River, San Leandro Creek, Damon Slough, Lake Merritt and Glen Echo Creek.

WaterKeepers of Northern California. Mar. 1, 2001. Photographs of trash in Guadalupe River.

Other Information Considered

D'Alessio, C. and S. Guldman. May 1, 2001. Letter to Christine Kennelly at BayKeeper. Friends of Corte Madera Creek Watershed.

Dick, M. Jan. 15, 2001. Letter to Tom Mumley at San Francisco bay Regional Water Quality Control Board. Santa Clara Basin Watershed Management Initiative.

Johmann, L. May 12, 2001. Letter to Steve Moore in Response to Public Solicitation of Water Quality Information Notice. Western Waters Canoe Club.

Olivieri, A. W. May 11, 2001. Letter to Loretta Barsamian in Response to Solicitation of Water Quality Information. Santa Clara Valley Urban Runoff Pollution Prevention Program.

Salzman, B. May 14, 2001. Letter to Loretta Barsamian in Response to Solicitation of Water Quality Information. Marin Audubon Society.

Regional Water Quality Control Board

CENTRAL COAST REGION (3)



SECTION 303 (d) LIST PROPOSALS

Page left blank intentionally.

Region 3: Alamo Creek

Fecal Coliform

Water Body	Alamo Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Water Quality Objective are applicable to REC-1.
Water Body-specific Information	Data age = 1-2 years old.
Data used to assess water quality	14 bacterial samples, 8 samples exceeding (57%) WQO.
Spatial representation	1 site.
Temporal representation	Monthly sampling events
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods .
Potential Source(s) of Pollutant	Natural sources, Agriculture, Range Land.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited adequate spatial and sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Alisal Creek (Salinas)

Nitrate

Water Body	Alisal Creek (Salinas)
Stressor/Media/Beneficial Use	Nitrate/Water/Drinking Water
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Nitrate WQO is linked to MUN.
Utility of measure for judging if standards or uses are not attained	Exceedences of Basin Plan Water quality objectives in place for the protection of Municipal Drinking Water is applicable.
Water Body-specific Information	Samples taken from 7/28/99 - 2/10/00.
Data used to assess water quality	6 samples with 5 exceedences.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient temporal coverage.3. Beneficial uses apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Alisal Creek (Salinas)

Dissolved Oxygen

Water Body	Alisal Creek (Salinas)
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	Water quality objective is applicable to Aquatic Life.
Water Body-specific Information	Samples taken from 7/28/1999 to 2/10/2000 over 6 sampling dates.
Data used to assess water quality	Dissolved Oxygen; 6 samples with 1 exceedence.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list for dissolved oxygen because applicable water quality standard is not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard for dissolved oxygen. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Alisal Creek (Salinas)

Fecal Coliform

Water Body	Alisal Creek (Salinas)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Water Quality Objective are applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old.
Data used to assess water quality	6 bacteria samples, 5 samples exceeding (83%) WQO.
Spatial representation	1 site.
Temporal representation	Summer, fall, winter sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) QA/QC methods.
Potential Source(s) of Pollutant	Urban Runoff, Natural Sources, Nonpoint sources, Agriculture
Alternative Enforceable Program	N/A
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information considered includes age of the data. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Arroyo Seco River

Dissolved Oxygen

Water Body	Arroyo Seco River
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQOs are linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	Dissolved Oxygen WQO is applicable to Aquatic Life.
Water Body-specific Information	Samples taken from 2/1/99 to 4/24/2000 over 17 sampling dates.
Data used to assess water quality	Dissolved Oxygen: 20 samples with 3 exceedences.
Spatial representation	2 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standards. The staff confidence that standards were not exceeded moderate.</p>

Region 3: Arroyo Seco River

Fecal Coliform

Water Body	Arroyo Seco River
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO exceedences are applicable.
Water Body-specific Information	Samples taken from 2/99-4/00; 10 sampling dates (some sampling dates have multiple samples).
Data used to assess water quality	18 samples, 3 exceeding WQO.
Spatial representation	2 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Atascadero Creek (San Luis Obispo County)

Dissolved Oxygen

Water Body	Atascadero Creek (San Luis Obispo County)
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Samples taken from 4/7/99 to 5/15/2000 over 18 sampling dates.
Data used to assess water quality	Dissolved Oxygen: 21 samples with 14 exceedences.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Atascadero Creek (San Luis Obispo County)

Fecal Coliform

Water Body	Atascadero Creek (San Luis Obispo County)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Samples taken from 4/99-5/00; 16 sampling dates (some sampling dates have multiple samples).
Data used to assess water quality	22 samples, 8 samples exceeding WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Bean Creek Sedimentation-Siltation

Water Body	Bean Creek
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data quality assurance procedures used. Assessment made of the consistency of methods used.
Linkage between measurement endpoint and beneficial use or standard	Geomorphological data is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Sedimentation can directly affect Aquatic Life.
Water Body-specific Information	Data 1-3 years old, samples collected from site, one time sample event.
Data used to assess water quality	Riffle/Run Embeddedness = 50% samples exceed at site 14a, 60% samples exceed at site 14b, 52% samples exceed at Site B-1, 50% samples exceeded at Site B-2, 60% samples exceeded at Site B-3 and 49% samples exceeded at B-4. For Fine Sediment in Riffles 45% exceeded at Site 14a, 42% samples exceeded at Site B-2 and 55% samples exceeded at Site B-3. For D50: 37mm (minimum for a reach) 24mm for site B-1, 25mm for site B-2 and 6mm for Site B-3. Data showed impacts on fish population due to sedimentation/siltation in 1998 and 1999.
Spatial representation	Zig-Zag sample design, 10 samples.
Temporal representation	Late spring-early summer.
Data type	Numerical data.
Use of standard method	Standard methods were used.
Potential Source(s) of Pollutant	Improper/illegal grading of private roads and home sites, lack of vegetation around home sites, residential use, roads, quarry.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited adequate spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used.

Region 3: Bean Creek Sedimentation-Siltation

8. Other water body- information including riffle/run embeddedness and age of the data were considered.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate, uncertain on how interpret riffle/run embeddedness.

Region 3: Bear Creek (Santa Cruz County)

Sedimentation-Siltation

Water Body	Bear Creek (Santa Cruz County)
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data quality assurance procedures used. Assessment made of the consistency of methods used.
Linkage between measurement endpoint and beneficial use or standard	Geomorphological data linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Sedimentation can directly affect Aquatic Life.
Water Body-specific Information	Data 1-3 years old, Samples collected from site, one time sample event.
Data used to assess water quality	Riffle/Run Embeddedness = 40% samples exceed at Site 17a, 37.5% samples exceed at Site 17b and 45% samples exceed at Site 17c. Data showed impacts on fish population due to sedimentation/siltation in 1998 and 1999.
Spatial representation	Zig-Zag sample design, 10 samples.
Temporal representation	Late spring-early summer.
Data type	Numerical data.
Use of standard method	Standard methods were used.
Potential Source(s) of Pollutant	Improper/illegal grading of private roads and home sites, lack of vegetation around home sites, residential use, recreation and timber.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited adequate spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- information including riffle/run embeddedness and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water</p>

Region 3: Bear Creek (Santa Cruz County)

Sedimentation-Siltation

quality standard. The staff confidence that standards were exceeded is moderate, uncertain on how interpret riffle/run embeddedness.

Region 3: Blosser Channel

Fecal Coliform

Water Body	Blosser Channel
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 1-2 years old.
Data used to assess water quality	10 Bacteria samples, 5 samples exceeding (50%) WQO.
Spatial representation	1 site.
Temporal representation	Monthly sampling events, excluding the dry season.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP).
Potential Source(s) of Pollutant	Agriculture, Pasture Lands, Urban Runoff, Storm water, Natural Sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Blosser Channel

Dissolved Oxygen

Water Body	Blosser Channel
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Samples taken from 5/3/2000 to 2/28/2001 over 12 sampling dates.
Data used to assess water quality	Dissolved Oxygen; 14 samples with 2 exceedences.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Boulder Creek Sedimentation-Siltation

Water Body	Boulder Creek
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data quality assurance procedures used. Assessment made of the consistency of methods used.
Linkage between measurement endpoint and beneficial use or standard	Geomorphological data linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	<i>Sedimentation can directly affect Aquatic Life.</i>
Water Body-specific Information	Data 1-3 years old, Samples collected from site, one time sample event.
Data used to assess water quality	Riffle/Run Embeddedness = 40% samples exceed at site 17a, and 37.5% samples exceed at site 18b. Data showed impacts on fish population due to sedimentation/siltation in 1998 and 1999.
Spatial representation	Zig-Zag sample design, 10 samples.
Temporal representation	Late spring-early summer.
Data type	Numerical data.
Use of standard method	Standard methods were used.
Potential Source(s) of Pollutant	Improper/illegal grading of private roads and home sites, lack of vegetation around home sites, residential use, vineyards and timber.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited adequate spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- information including riffle/run embeddedness and age of the data were considered.

Region 3: Boulder Creek Sedimentation-Siltation

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate, uncertain on how to interpret riffle/run embeddedness.

Region 3: Bradley Canyon Creek

Dissolved Oxygen

Water Body	Bradley Canyon Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Low oxygen levels linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	Exceedences of Basin Plan water quality objective in place for the protection of aquatic life is applicable.
Water Body-specific Information	Samples taken from 1/12/2000 to 1/29/2001 over 19 sampling dates.
Data used to assess water quality	Dissolved Oxygen: 9 samples with 2 exceedences.
Spatial representation	3 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Bradley Canyon Creek

Fecal coliform

Water Body	Bradley Canyon Creek
Stressor/Media/Beneficial Use	Fecal coliform/water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to REC-1.
Water Body-specific Information	Data age = 1-2 years old.
Data used to assess water quality	25 Bacteria samples, 15 samples exceeding (60% WQO violations).
Spatial representation	3 Stations.
Temporal representation	Monthly sampling events, excluding the dry season.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Agriculture, Pasture Lands , Urban Runoff, Storm water, Natural Sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p>

This conclusion is based on the staff findings that:

1. The data is considered to be of adequate.
2. The data exhibited sufficient spatial and temporal coverage.
3. Beneficial uses apply to the water body.
4. Water quality standard used is applicable.
5. Data are numerical.
6. Standard methods were used.
7. Other water body information considered includes age of the data.

Adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 3: Bradley Canyon Creek

Nitrate

Water Body	Bradley Canyon Creek
Stressor/Media/Beneficial Use	Nitrate/Water/MUN
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Nitrate WQO is linked to MUN.
Utility of measure for judging if standards or uses are not attained	WQOs are applicable to MUN.
Water Body-specific Information	Samples taken from 3/12/00 to 12/07/00. There were 8 sampling dates.
Data used to assess water quality	8 samples, 4 samples exceeding. Impacts on dissolved oxygen were not observed and it is likely that the nitrate concentrations are not impacting beneficial uses.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because it cannot be determined if the applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data exhibited insufficient temporal coverage. 2. Data are numerical. 3. Standard methods were used. 4. Other water body information including age of the data were considered. <p>An inadequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Bradley Channel

Fecal Coliform

Water Body	Bradley Channel
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal coliform WQO is linked to Rec-1.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to REC-1.
Water Body-specific Information	Samples taken from 1/00-2/01; 14 sampling dates.
Data used to assess water quality	14 samples, 7 samples exceeding WQO.
Spatial representation	1 sample site.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Bradley Channel

Dissolved Oxygen

Water Body	Bradley Channel
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Samples taken from 1/11/2000 to 2/28/2001; over 17 sampling dates.
Data used to assess water quality	Dissolved Oxygen: 17 samples with 4 exceedences.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Bradley Channel

Nitrate

Water Body	Bradley Channel
Stressor/Media/Beneficial Use	Nitrate/Water/MUN
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Nitrate WQO is linked to MUN.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to MUN.
Water Body-specific Information	Samples taken from 1/11/00 to 2/28/01.
Data used to assess water quality	15 samples with 3 exceedences.
Spatial representation	1 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited insufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements collected. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Branciforte Creek

Sedimentation-Siltation

Water Body	Branciforte Creek
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data quality assurance procedures used. Assessment made of the consistency of methods used.
Linkage between measurement endpoint and beneficial use or standard	Geomorphological data linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Sedimentation can directly affect Aquatic Life.
Water Body-specific Information	Data = 3-4 years old (1998 and 1999), samples collected from site.
Data used to assess water quality	Riffle/Run Embeddedness = 60% samples exceed at Site 21a and 37.5% samples exceed at Site 21b. Data showed impacts on fish population due to sedimentation/siltation in 1998 and 1999.
Spatial representation	Zig-Zag sample design, 10 samples.
Temporal representation	Late spring-early summer.
Data type	Numerical data.
Use of standard method	Standard methods were used.
Potential Source(s) of Pollutant	Logging in upper watershed, improper/illegal.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited adequate spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- information including riffle/run embeddedness and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water</p>

Region 3: Branciforte Creek Sedimentation-Siltation

quality standard. The staff confidence that standards were exceeded is moderate, uncertain on how to interpret riffle/run embeddedness.

Region 3: Carpinteria Creek Virus

Water Body	Carpinteria Creek
Stressor/Media/Beneficial Use	Virus/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Unknown
Linkage between measurement endpoint and beneficial use or standard	Virus with Bacteria WQO are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Virus detection methodology not conclusive enough to indicate a virus problem, 30% of the samples has positive results for presence of a virus. There are too few virus data points during the most sensitive period (typically winter for pathogens). These water bodies are already covered by the existing 303(d) list. Bacteria reductions recommended through TMDLs for these waters will also result in virus reductions.
Water Body-specific Information	Data was not presented.
Data used to assess water quality	Data was not presented.
Spatial representation	Data was not presented.
Temporal representation	Data was not presented.
Data type	Data was not presented.
Use of standard method	Approved methodologies were not used.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be included on the 303(d) list because the water body is on an existing list for bacteria and pathogens which will address viruses.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be inadequate quality. 2. The evaluation guideline used to interpret narrative water quality standards is inadequate. 3. Non-standard methods were used. 4. Other water body information considered is unknown. <p>It is unknown whether any of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is extremely low.</p>

Region 3: Cholame Creek

Fecal Coliform

Water Body	Cholame Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old.
Data used to assess water quality	10 bacterial samples, 8 samples exceeding (80%) WQO.
Spatial representation	1 site.
Temporal representation	Monthly sampling events, excluding the dry season.
Data type	Numerical.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Pasture lands, nonpoint sources, natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information considered includes age of the data. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Cholame Creek

Dissolved Oxygen

Water Body	Cholame Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to COLD and WARM beneficial use protection.
Water Body-specific Information	Data: 2-3 years old (2/2/99 to 2/8/2000); over 10 sampling dates.
Data used to assess water quality	Dissolved Oxygen: 13 samples with 2 exceedences.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Cholame Creek

Boron

Water Body	Cholame Creek
Stressor/Media/Beneficial Use	Boron/Water/Agricultural Water Supply
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Boron WQO is linked to Agricultural Water Supply.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Agricultural Water Supply.
Water Body-specific Information	Samples taken from 5/99-2/00; 6 sampling dates.
Data used to assess water quality	7 samples, 7 samples exceeding WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown; may be natural condition.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Chorro Creek

Fecal Coliform

Water Body	Chorro Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data: 3-9 years old (6/93 to 5/99).
Data used to assess water quality	869 samples, 193 samples exceeding WQO.
Spatial representation	6 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methodology.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Chorro Creek

Metals

Water Body	Chorro Creek
Stressor/Media/Beneficial Use	Metals/Sediment/Aquatic Life (Habitat Uses)
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/Q.
Linkage between measurement endpoint and beneficial use or standard	Metal WQOs are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Recently collected data show that standards appear to be met. The original assessment was based on two sample locations outside of Chorro Creek.
Water Body-specific Information	The data originally used to support this listing decision was not collected in the water body.
Data used to assess water quality	New data was not presented.
Spatial representation	Data not collected in Chorro Creek and does not represent conditions in the creek.
Temporal representation	Unknown
Data type	N/A
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	Siltation TMDL is expected to reduce metal loads.
RWQCB Recommendation	Delist because data was obtain from outside the waterbody.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because data used in listing is insufficient. Data were not collected in Chorro Creek and do not represent the conditions in the creek.

Region 3: Chumash Creek

Dissolved Oxygen

Water Body	Chumash Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	Exceedances of Basin Plan water quality objective in place for the protection of aquatic life.
Water Body-specific Information	Samples taken from 6/8/93 to 5/10/99 with over 62 sampling dates.
Data used to assess water quality	<p>Dissolved Oxygen: 230 samples with 35 exceedances.</p> <p>Nutrients are not considered to be a problem in this water body. Only four samples of 198 measurements exceeded the water quality objective for nitrate.</p>
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the list for dissolved oxygen because the applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the</p>

Region 3: Chumash Creek

Dissolved Oxygen

water quality standards for dissolved oxygen. The staff confidence that standards were exceeded is high.

Region 3: Chumash Creek

Fecal Coliform

Water Body	Chumash Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC methodology.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data: 3-9 years old (6/93-5/99).
Data used to assess water quality	246 samples, 70 samples exceeding WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methodology.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Corralitos Creek

Fecal Coliform

Water Body	Corralitos Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data: 4-5 years old (Samples taken from 12/97 to 12/98).
Data used to assess water quality	13 samples, 4 samples exceeding WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Corralitos Creek

Dissolved Oxygen

Water Body	<i>Corralitos Creek</i>
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQOs is applicable to Aquatic Life.
Water Body-specific Information	Data: 3-5 years old (Samples were taken from 8/18/1997 to 12/16/1998; over 15 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 16 samples with 4 exceedences.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	<i>Central Coast Ambient Monitoring Program (CCAMP) methods.</i>
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Cuyama River

Boron

Water Body	Cuyama River
Stressor/Media/Beneficial Use	Boron/Water/Agricultural Water Supply
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Boron is linked to Basin Plan Agricultural Water Supply.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to Agricultural Water Supply.
Water Body-specific Information	Data: 2 year old (Samples taken from 4/00 to 12/00; 5 sampling dates).
Data used to assess water quality	43 samples, 3 samples exceeding WQO.
Spatial representation	4 sample sites.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown; may be natural condition.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Dairy Creek

Fecal Coliform

Water Body	Dairy Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to REC-1.
Water Body-specific Information	Data: 3-9 years old (Samples taken from 6/93 to 5/99).
Data used to assess water quality	635 samples, 156 samples exceeding WQO.
Spatial representation	3 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methodology.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 8. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Dairy Creek

Dissolved Oxygen

Water Body	Dairy Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/Q.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to COLD and WARM beneficial uses.
Water Body-specific Information	Data: 3-7 years old (Samples taken from 6/8/1993 to 5/10/1999 over 291 sampling dates).
Data used to assess water quality	Dissolved Oxygen; 602 samples with 110 exceedences.
Spatial representation	3 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methodology.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list for dissolved oxygen because applicable water quality standard is exceeded and it is probable that a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard for dissolved oxygen. The staff confidence that standards were exceeded is high.</p>

Region 3: Elkhorn Slough

Dissolved Oxygen

Water Body	Elkhorn Slough
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data: 2-3 years old (Samples taken from 3/1/1999 to 3/7/2000; over 14 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 15 samples with 4 exceedences.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Fall Creek Sedimentation-Siltation

Water Body	Fall Creek
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data quality assurance procedures used. Assessment made of the consistency of methods used.
Linkage between measurement endpoint and beneficial use or standard	Geomorphological data linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Sedimentation can directly affect Aquatic Life.
Water Body-specific Information	Data = 1-2 years old (1998 and 1999), samples collected from site.
Data used to assess water quality	Riffle/Run Embeddedness = 47.5% samples exceed at Site 15. For Fine Sediment in Riffles = 40% samples exceed at Site 15 (Sample size unknown in all cases). Data showed impacts on fish population due to sedimentation/siltation in 1998 and 1999.
Spatial representation	Zig-Zag sample design, 10 samples.
Temporal representation	Late spring-early summer.
Data type	Numerical data.
Use of standard method	Standard methods were used.
Potential Source(s) of Pollutant	Trail system in Fall State Park (stream mile 1 and above), bank erosion/slumping, Residential use, road, trails.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited adequate spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- information including riffle/run embeddedness and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water</p>

Region 3: Fall Creek Sedimentation-Siltation

quality standard. The staff confidence that standards were exceeded is moderate, uncertain on how to interpret riffle/run embeddedness.

Region 3: Gabilan Creek

Fecal Coliform

Water Body	Gabilan Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old.
Data used to assess water quality	6 bacteria samples, 6 samples exceeding (100%) WQO.
Spatial representation	1 site
Temporal representation	Spring and winter sampling events during 1999 - 2000.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Urban Runoff, Natural Sources, Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Kings Creek Sedimentation-Siltation

Water Body	Kings Creek
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data quality assurance procedures used. Assessment made of the consistency of methods used.
Linkage between measurement endpoint and beneficial use or standard	Geomorphological data linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Sedimentation can directly affect Aquatic Life.
Water Body-specific Information	Data = 2 years (1998 and 1999), samples were collected from site.
Data used to assess water quality	Riffle/Run Embeddedness = 52.5% sample exceed at site 19b. Data showed impacts on fish population due to sedimentation/siltation in 1998 and 1999.
Spatial representation	Zig-Zag sample design, 10 samples.
Temporal representation	Late spring-early summer.
Data type	Numerical data.
Use of standard method	Standard methods were used.
Potential Source(s) of Pollutant	Improper/illegal grading of private roads and home sites, lack of vegetation around home sites, residential use, roads and timber.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited adequate spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- information including riffle/run embeddedness and age of the data were considered.

Region 3: Kings Creek Sedimentation-Siltation

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate, uncertain on how to interpret riffle/run embeddedness.

Region 3: La Brea Creek

Fecal Coliform

Water Body	La Brea Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to REC-1.
Water Body-specific Information	Data: 1-2 years old (samples taken from 1/12/00 to 2/28/01).
Data used to assess water quality	143 samples, 3 samples exceeding WQO.
Spatial representation	1 sampling site
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methodology.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: LaBrea Creek

Dissolved Oxygen

Water Body	LaBrea Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is linked to Aquatic Life.
Water Body-specific Information	Data: 1-2 years old (samples taken from 1/12/2000 to 2/28/2001; over 18 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 19 samples with 3 exceedences.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methodology.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Llagas Creek

TDS

Water Body	Llagas Creek
Stressor/Media/Beneficial Use	TDS/Water/Aquatic Life and Agriculture
Data quality assessment. Extent to which data quality requirements met.	South County Regional Wastewater Authority (SCRWA) QA/QC
Linkage between measurement endpoint and beneficial use or standard	TDS WQO is linked to Aquatic Life and Agriculture.
Utility of measure for judging if standards or uses are not attained	WQOs are applicable to Aquatic Life and Agriculture.
Water Body-specific Information	Data age = 2-4 years old.
Data used to assess water quality	90 water samples, 90 sample exceeding (100%) WQO.
Spatial representation	4 Stations.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	South County Regional Wastewater Authority (SCRWA) methods.
Potential Source(s) of Pollutant	Nonpoint and point sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p><i>This conclusion is based on the staff findings that:</i></p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Llagas Creek

Sodium

Water Body	Llagas Creek
Stressor/Media/Beneficial Use	Sodium/Water/Agriculture, Aquatic Life and Drinking Water
Data quality assessment. Extent to which data quality requirements met.	South County Regional Wastewater Authority (SCRWA) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Sodium is linked to Agriculture, Aquatic Life and Drinking Water.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Agriculture, Aquatic Life and Drinking Water.
Water Body-specific Information	Data age = 2-10 years old.
Data used to assess water quality	78 water samples, 60 sample exceeding (77%) WQO.
Spatial representation	4 Stations.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	South County Regional Wastewater Authority (SCRWA) methods.
Potential Source(s) of Pollutant	Nonpoint and unknown sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Llagas Creek

Dissolved Oxygen

Water Body	Llagas Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	South County Regional Wastewater Authority (SCRWA) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 2-4 years old. Samples taken between 12/18/97 and 1/7/99 over 30 sampling dates.
Data used to assess water quality	Dissolved Oxygen: 90 samples with 16 exceeding the WQO.
Spatial representation	7 Stations.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	South County Regional Wastewater Authority (SCRWA) methods.
Potential Source(s) of Pollutant	Nonpoint and point source.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including season and age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 3: Llagas Creek

pH

Water Body	Llagas Creek
Stressor/Media/Beneficial Use	pH/Water/Aquatic Life and MUN
Data quality assessment. Extent to which data quality requirements met.	South County Regional Wastewater Authority (SCRWA) QA/QC
Linkage between measurement endpoint and beneficial use or standard	pH WQO is linked to Aquatic Life and MUN.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life and MUN.
Water Body-specific Information	Data age = 2-4 years old.
Data used to assess water quality	128 samples, 42 samples exceeding.
Spatial representation	4 stations.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	South County Regional Wastewater Authority (SCRWA) methodology.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Llagas Creek

Fecal Coliform

Water Body	Llagas Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO applicable to REC-1.
Water Body-specific Information	Data age = 3-4 years old.
Data used to assess water quality	41 bacteria samples, 26 samples exceeding (63%) WQO.
Spatial representation	3 Stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Pasture lands, nonpoint sources, natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Llagas Creek Chloride

Water Body	Llagas Creek
Stressor/Media/Beneficial Use	Chloride/Water/Agriculture and Drinking Water
Data quality assessment. Extent to which data quality requirements met.	South County Regional Wastewater Authority (SCRWA) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Chloride WQO is linked to Agriculture and Drinking Water.
Utility of measure for judging if standards or uses are not attained	Site-specific WQO applicable to Agriculture and Drinking Water.
Water Body-specific Information	Data age = 2-10 years old.
Data used to assess water quality	78 water samples, 78 samples exceeding (100%) WQO.
Spatial representation	4 Stations.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	South County Regional Wastewater Authority (SCRWA) methodology.
Potential Source(s) of Pollutant	Nonpoint and point sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Los Osos Creek

Fecal Coliform

Water Body	Los Osos Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to REC-1.
Water Body-specific Information	Data age = 3-6 years old (samples taken from 3/96 to 5/99).
Data used to assess water quality	242 samples, 63 samples exceeding WQO.
Spatial representation	2 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methodology.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Los Osos Creek

Priority organics

Water Body	Los Osos Creek
Stressor/Media/Beneficial Use	Priority organics/Water--Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Priority Organic WQO is linked to Aquatic life
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	The data are one year old. Samples were collected in the Spring and Summer of 2001. Two sampling events at most of the 5 sites for both water and sediment. The total number of samples collected during the 2 sampling events were 9 water and 8 sediment samples.
Data used to assess water quality	9 water sample/0 samples exceeding and 8 sediment samples/0 samples exceeding. The results indicate chemical in concentrations below NOAA and ERMs.
Spatial representation	Five sites.
Temporal representation	Two sampling events in 2001.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because new data points towards no impairment. Most current data indicates WQO per CTR and BP are met.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded in sediment or water.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body information including the effects of season and age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 3: Los Osos Creek

Dissolved Oxygen

Water Body	Los Osos Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to aquatic life protection.
Water Body-specific Information	Data age = 3-7 years old. Samples taken from 1/26/94 to 5/10/99 with over 147 sampling dates.
Data used to assess water quality	251 water samples, 44 samples exceeding WQO.
Spatial representation	2 Stations.
Temporal representation	Sampled monthly during all seasons.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methodology.
Potential Source(s) of Pollutant	Agriculture, Urban Runoff, Pasture Lands, Unknown Sources.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 3: Love Creek Sedimentation-Siltation

Water Body	Love Creek
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data quality assurance procedures used. Assessment made of the consistency of methods used.
Linkage between measurement endpoint and beneficial use or standard	Geomorphological data linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Sedimentation can directly affect Aquatic Life.
Water Body-specific Information	Data = 2 years old (samples taken in 1998 and 1999), Samples collected from site.
Data used to assess water quality	Riffle/Run Embeddedness = 44% samples exceed at Site L-1. For D50: 37 = 30mm sample at Site Z-8. Data showed impacts on fish population due to sedimentation/siltation in 1998 and 1999.
Spatial representation	Zig-Zag sample design, 10 samples.
Temporal representation	Late spring-early summer.
Data type	Numerical data.
Use of standard method	Standard methods were used.
Potential Source(s) of Pollutant	Improper/illegal grading of private roads and home sites, lack of vegetation around home sites, agriculture, residential use, roads and timber.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited adequate spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- information including riffle/run embeddedness and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water</p>

Region 3: Love Creek Sedimentation-Siltation

quality standard. The staff confidence that standards were exceeded is moderate, uncertain on how to interpret riffle/run embeddedness.

Region 3: Main Street Canal

Nitrate

Water Body	Main Street Canal
Stressor/Media/Beneficial Use	Nitrate/Water/Drinking Water
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Nitrate WQO is linked to Drinking Water.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Drinking Water.
Water Body-specific Information	Data age = 1-2 years old.
Data used to assess water quality	10 water samples, 6 samples exceeding (60%) WQO.
Spatial representation	1 site.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Agriculture, Nonpoint Sources and Urban Runoff.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Majors Creek

Turbidity

Water Body	Majors Creek
Stressor/Media/Beneficial Use	Turbidity/Water/MUN and Aquatic life (WARM, COLD, SPWN)
Data quality assessment. Extent to which data quality requirements met.	City of Santa Cruz data, QAPP unknown.
Linkage between measurement endpoint and beneficial use or standard	Heavy sedimentation affects drinking water quality and habitat functions.
Utility of measure for judging if standards or uses are not attained	Narrative objective: Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.
Water Body-specific Information	<p>The City of Santa Cruz staff have stated this watershed is experiencing <i>increasingly frequent periods of high turbidity associated with the heavy sedimentation attributed to natural background erosion sources, the large network of unmaintained seasonal roads, log jam related stream bank erosions, feral pig activity and other factors.</i> In addition to drinking water quality and production challenges posed by these conditions, the channel itself (especially the East Branch) is choked with sediment, thereby limiting habitat functions.</p>
Data used to assess water quality	<p>The City describes high turbidity associated with heavy sedimentation due to <i>erosion, seasonal roads, log jam-related erosion, feral pigs, and other factors.</i> Photographs and some turbidity data were submitted.</p> <p>It is difficult to interpret the photographs submitted for sediment impairment. In addition, it is difficult to compare the turbidity information to measure impact, because turbidity measured used in samples (NTU) differ from the Basin Plan's turbidity units (JTU). There is not a conversion from NTUs to JTUs. The data cannot be compared to the water quality objective.</p> <p>In addition, written comments and recommendations of the Gray Whale Ranch Investors' Timber Harvest Plan (THP) in the Majors Creek Watershed from a certified Fisheries Scientist was submitted and reviewed. The document describes the effects of sedimentation on streambank erosion and degradation on condition of creek. The biologist recommends that independent, post-harvest monitoring should be conducted to verify that the THP has reduced erosion and stream sedimentation after logging. This report is a summary, narrative report noting the biologist's opinions of the watershed. No actual quantitative data are presented.</p>
Spatial representation	Unknown.
Temporal representation	Unknown.
Data type	Both numerical and non-numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Natural sources, erosion, unmaintained roads, log jams, stream bank erosion, feral pig activity

Region 3: Majors Creek Turbidity

Alternative Enforceable Program

RWQCB Recommendation

List.

SWRCB Staff Recommendation

After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if applicable water quality standards are exceeded.

This conclusion is based on the staff findings that:

1. The data is considered to be of unknown quality. Turbidity measurements do not correspond to turbidity units used in the basin plan. Photographs submitted are difficult to quantify.
2. The data exhibited insufficient spatial and temporal coverage.

An inadequate amount of the water quality data and information exceeded the water quality standard. The staff confidence that standards were exceeded is extremely low.

Region 3: Monterey Bay at Aquarium

Dissolved Oxygen, temperature, total coliform, fecal coliform, enteroc +

Water Body	Monterey Bay at Aquarium
Stressor/Media/Beneficial Use	Dissolved Oxygen, temperature, total coliform, fecal coliform, enterococcus, total ammonia, nitrite, nitrate, phosphate, pH/Water/All Ocean-Bay Uses
Data quality assessment. Extent to which data quality requirements met.	Monterey Bay Aquarium QA/QC
Linkage between measurement endpoint and beneficial use or standard	Measurements related to all Ocean Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	Ocean Plan Objectives are applicable Ocean uses.
Water Body-specific Information	Data age = 1 - 5 years old.
Data used to assess water quality	Number of samples unknown, question about quality of D.O. measurements after passing through pump and sump house.
Spatial representation	Only represents one point at 50 foot depth in all of Monterey Bay.
Temporal representation	D.O. data only covered one year; Only one summer (June-Aug 2000) of poor D.O. results; Other stressors sampled for five years.
Data type	Numerical Data; Dissolved Oxygen data judged to be insufficient for this listing cycle due to questions of temporal, spatial, and Dissolved Oxygen data quality
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the list based on the inadequate spatial and temporal coverage.</p> <p>The staff confidence that standards were exceeded is extremely low.</p>

Region 3: Moro Cojo Slough

Fecal Coliform

Water Body	Moro Cojo Slough
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 4/1999 to 2/2000).
Data used to assess water quality	7 samples, 1 samples exceeding WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is low.</p>

Region 3: Moro Cojo Slough

Dissolved Oxygen

Water Body	Moro Cojo Slough
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 3/1/1999 to 3/7/2000 over 13 sampling dates).
Data used to assess water quality	Dissolved Oxygen; 14 samples with 9 exceedences.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Moss Landing Harbor

Dissolved Oxygen

Water Body	Moss Landing Harbor
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 3/1/1999 to 3/7/2000 over 14 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 15 samples with 0 exceedences.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that the standard was not exceeded is high.</p>

Region 3: Mountain Charlie Gulch

Sedimentation-Siltation

Water Body	Mountain Charlie Gulch
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data quality assurance procedures used. Assessment made of the consistency of methods used.
Linkage between measurement endpoint and beneficial use or standard	Geomorphological data linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Sedimentation can directly affect aquatic life.
Water Body-specific Information	Data age = 2 years old (1998 and 1999), Samples collected from site.
Data used to assess water quality	Rifle/Run embeddedness = 40% samples exceed at Site 16b, 35% samples exceed at Site 16c. For Fine Sediments in Riffles = 38% samples exceed at Site Z-3. For D50: 37mm (minimum for a reach) = 11mm at Site Z-3. Data showed impacts on fish population due to sedimentation/siltation in 1998 and 1999.
Spatial representation	Zig-Zag sample design, 10 samples.
Temporal representation	Late spring-early summer.
Data type	Numerical data.
Use of standard method	Standard methods were used.
Potential Source(s) of Pollutant	Residential use, timber, roads.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited adequate spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- information including riffle/run embeddedness and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water</p>

Region 3: Mountain Charlie Gulch

Sedimentation-Siltation

quality standard. The staff confidence that standards were exceeded is moderate, uncertain on how to interpret riffle/run embeddedness.

Region 3: Newell Creek (Upper)

Sedimentation-Siltation

Water Body	Newell Creek (Upper)
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data quality assurance procedures used. Assessment made of the consistency of methods used.
Linkage between measurement endpoint and beneficial use or standard	Geomorphological data linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Sedimentation can directly affect aquatic life.
Water Body-specific Information	Data = 2 years old (1998 and 1999), Samples collected from site.
Data used to assess water quality	Riffle/Run embeddedness = 40% samples exceed at Site 16b, 35% samples exceed at Site 16c. Data showed impacts on fish population due to sedimentation/siltation in 1998 and 1999.
Spatial representation	Zig-Zag sample design, 10 samples.
Temporal representation	Late spring-early summer.
Data type	Numerical data.
Use of standard method	Standard methods were used.
Potential Source(s) of Pollutant	Improper/illegal grading of private roads and home sites, lack of vegetation around home sites, agriculture, residential use, roads and timber.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited adequate spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- information including riffle/run embeddedness and age of the data were considered.

Region 3: Newell Creek (Upper)

Sedimentation-Siltation

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate, uncertain on how to interpret riffle/run embeddedness.

Region 3: Nipomo Creek

Dissolved Oxygen

Water Body	Nipomo Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	Exceedances of Basin Plan water quality objective in place for the protection of aquatic life.
Water Body-specific Information	Samples taken from 6/29/00 to 3/1/01 with over 18 sampling dates.
Data used to assess water quality	Dissolved Oxygen: 31 samples with 4 exceedances.
Spatial representation	2 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the list for dissolved oxygen because the applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standards for dissolved oxygen. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Nipomo Creek

Fecal Coliform

Water Body	Nipomo Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to REC-1.
Water Body-specific Information	Data age = 1-2 years old.
Data used to assess water quality	25 bacteria samples, 18 exceeding samples (72%) WQO.
Spatial representation	2 sites.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Urban Runoff, Agriculture, Natural Sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>Adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Old Salinas River Estuary

Dissolved Oxygen

Water Body	Old Salinas River Estuary
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 3/1/1999 to 3/7/2000 over 14 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 28 samples with 11 exceedences.
Spatial representation	2 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that the standard was exceeded is moderate.</p>

Region 3: Old Salinas River Estuary

Fecal Coliform

Water Body	Old Salinas River Estuary
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 4/99 to 2/00).
Data used to assess water quality	19 samples, 6 samples exceeding WQO.
Spatial representation	2 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Orcutt Solomon Creek

Dissolved Oxygen

Water Body	Orcutt Solomon Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/Q.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 1-2 year old (samples taken from 1/12/2000 to 2/28/2001 over 18 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 42 samples with 2 exceedences.
Spatial representation	4 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that the standard was not exceeded is high.</p>

Region 3: Orcutt Solomon Creek

Fecal Coliform

Water Body	Orcutt Solomon Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable REC-1.
Water Body-specific Information	Data age = 1-2 years old.
Data used to assess water quality	50 bacteria samples, 31 samples exceeding (62%) WQO
Spatial representation	3 sites
Temporal representation	Monthly sampling events
Data type	Numerical.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Pasture lands, nonpoint sources, natural sources and Agriculture.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Orcutt Solomon Creek

Boron

Water Body	Orcutt Solomon Creek
Stressor/Media/Beneficial Use	Boron/Water/Agricultural Water Supply
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Boron WQO is linked to Agricultural Water Supply.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to Agriculture Water Supply.
Water Body-specific Information	Data age = 2 years old (samples taken from 4/2000 to 12/2000).
Data used to assess water quality	34 samples, 5 samples exceeding WQO.
Spatial representation	3 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown; may be natural condition.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Orcutt Solomon Creek

Nitrate

Water Body	Orcutt Solomon Creek
Stressor/Media/Beneficial Use	Nitrate/Water/Drinking Water
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Nitrate WQO is linked to MUN.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to MUN.
Water Body-specific Information	Data age = 1-2 years old (samples taken from 1/12/00 to 2/28/01).
Data used to assess water quality	45 samples, 31 samples exceeding.
Spatial representation	3 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Oso Flaco Creek

Fecal Coliform

Water Body	Oso Flaco Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 1-2 years old (samples taken from 1/2000 to 1/2001; 13 sampling dates).
Data used to assess water quality	14 samples, 6 samples exceeding WQO.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Oso Flaco Creek

Dissolved Oxygen

Water Body	Oso Flaco Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 1-2 years old (samples taken from 1/12/2000 to 3/1/2001 over 19 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 15 samples, 0 samples exceeding.
Spatial representation	4 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 3: Oso Flaco Creek

Nitrate

Water Body	Oso Flaco Creek
Stressor/Media/Beneficial Use	Nitrate/Water/MUN
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Nitrate WQO is linked to MUN.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to MUN.
Water Body-specific Information	Data age = 1-2 years old (samples taken from 1/12/00 to 1/31/01).
Data used to assess water quality	15 samples with 15 samples exceeding.
Spatial representation	2 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Oso Flaco Lake

Nitrate

Water Body	Oso Flaco Lake
Stressor/Media/Beneficial Use	Nitrate/Water/MUN
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Nitrate WQO is linked to MUN.
Utility of measure for judging if standards or uses are not attained	WQOs are applicable to MUN.
Water Body-specific Information	Data age = 1-2 years old.
Data used to assess water quality	55 water samples, 55 samples exceeding (100%) WQO.
Spatial representation	3 Stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Agriculture and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Oso Flaco Lake

Dissolved Oxygen

Water Body	Oso Flaco Lake
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 2 years old (samples taken from 9/7/2000 to 9/8/2000 over 2 sampling dates).
Data used to assess water quality	Dissolved Oxygen; 12 samples, 0 samples exceeding.
Spatial representation	6 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list for dissolved oxygen because applicable water quality standard is not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard for dissolved oxygen. The staff confidence that standards were not exceeded is high.</p>

Region 3: Pacheco Creek

Fecal Coliform

Water Body	Pacheco Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 12/1997 to 12/1998).
Data used to assess water quality	13 samples, 3 samples exceeding WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacheco Creek

Dissolved Oxygen

Water Body	Pacheco Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 4-5 years old (samples taken from 12/18/1997 to 12/16/1998 over 15 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 16 samples, 3 samples exceeding.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacific Ocean (various sites)

Total coliform, e. coli, enterococcus, nitrate, phosphate, sulfate, tu +

Water Body	Pacific Ocean (various sites)
Stressor/Media/Beneficial Use	Total coliform, E. coli, Enterococcus, nitrate, phosphate, sulfate, turbidity, Dissolved Oxygen, temperature, conductivity, pH/water/all ocean-bay uses
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara Channel Keeper, QA/QC is unknown
Linkage between measurement endpoint and beneficial use or standard	Measurements are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Unknown.
Water Body-specific Information	Unknown.
Data used to assess water quality	Data indicates suddenly elevated bacteria concentrations but standards are not exceeded. Data supplemented with data from Santa Barbara County Public Health Dept., leading to three beaches to be listed.
Spatial representation	Unknown.
Temporal representation	Unknown.
Data type	Unknown.
Use of standard method	Standard methods were not used.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of inadequate quality.2. The data exhibited sufficient spatial and temporal coverage is unknown. <p>Uncertain whether water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is extremely low.</p>

Region 3: Pacific Ocean at Arroyo Burro (Santa Barbara County)

Total Coliform

Water Body	Pacific Ocean at Arroyo Burro (Santa Barbara County)
Stressor/Media/Beneficial Use	Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform Ocean standards are linked to the REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable.
Water Body-specific Information	Data age = 8/5/96-4/25/01.
Data used to assess water quality	Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 3/3-4/14/97; 1/12-3/2/98; 3/1-4/26/99. Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 5/5-6/2/97; 12/29/97-1/27/98; 2/2-3/2/98; 3/2-30/98; 5/4-6/1/98; 7/6-29/98; 8/3-8/31/98; 1/25-1/27/99; 4/5-5/3/99; 5/10-6/1/99; 1/31-2/28/00.
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standard for total coliform are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of water quality measurements exceeded the water quality standard for total coliform. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)

Virus

Water Body	Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Virus/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Unknown
Linkage between measurement endpoint and beneficial use or standard	Virus indicators-Bacteria WQOs are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	These water bodies are already covered by the existing 303(d) list. Bacteria reductions recommended through TMDLs for these waters will also result in virus reductions.
Water Body-specific Information	Data was not presented.
Data used to assess water quality	Data was not presented.
Spatial representation	Data was not presented.
Temporal representation	Unknown
Data type	Data was not presented.
Use of standard method	An approved methodology was not used.
Potential Source(s) of Pollutant	Data was not presented.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be included on the 303(d) list because the water body is on an existing list for bacteria and pathogens which will address viruses.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be inadequate quality. 2. Data types are unknown. 3. Other water body information considered is unknown. <p>It is unknown whether any of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is extremely low.</p>

Region 3: Pacific Ocean at Arroyo Quemado Beach (Santa Barbara County + Fecal Coliform)

Water Body	Pacific Ocean at Arroyo Quemado Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Public Health Dept. (SBCPHD) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan WQO is applicable to REC-1. AB 411 standards are applicable.
Water Body-specific Information	Data age = 0-5 years old. Recent data collected between April 15, 2002 and December 2, 2002.
Data used to assess water quality	250 bacteria samples, 143 samples exceeding (57%) WQO. Recent data collected between April and December, 2002: 34 samples, 0% exceeding the AB 411 standards. A DNA study was conducted to determine the source of the previously high bacteria densities. The results of the study showed that avian sources accounted for 79% of the elevated bacteria, 52% was attributed to gulls alone. The balance of DNA was from wildlife (18%) and domestic (3%) sources. Bacteria densities on the beach have been reduced since the implementation of a bird management plan to deter gulls from using the surrounding areas.
Spatial representation	1 site.
Temporal representation	Monthly sampling events. Recent data collected between April and December, 2002: approximately weekly.
Data type	Numerical data.
Use of standard method	Santa Barbara County Public Health Dept. (SBCPHD) methods.
Potential Source(s) of Pollutant	Pasture Lands, Agriculture, Nonpoint and natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are currently not exceeded. This conclusion is based on the staff findings that: 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body.

Region 3: Pacific Ocean at Arroyo Quemado Beach (Santa Barbara County + Fecal Coliform)

- 4. Water quality standard used is applicable.
- 5. Data are numerical.
- 6. Standard methods were used.
- 7. Other water body information considered includes age of the data.

In recently collected data, none of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.

Region 3: Pacific Ocean at Arroyo Quemado Beach (Santa Barbara County + Total Coliform

Water Body	Pacific Ocean at Arroyo Quemado Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Total Coliform/Water/Ocean Plan Shellfish Harvest and REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Public Health Dept. (SBCPHD) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Total coliform Ocean Plan standards are linked to Shellfish Harvest and REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan WQO are applicable to Ocean Plan Shellfish Harvest and REC-1.
Water Body-specific Information	Data age = 1-5 years old. Recent data collected between April 15, 2002 and December 2, 2002.
Data used to assess water quality	250 bacteria samples, 213 samples exceeding (85%) WQO. Recent data collected between April and December, 2002: 34 samples, 0% exceeding the AB 411 standards. A DNA study was conducted to determine the source of the previously high bacteria densities. The results of the study showed that avian sources accounted for 79% of the elevated bacteria, 52% was attributed to gulls alone. The balance of DNA was from wildlife (18%) and domestic (3%) sources. Bacteria densities on the beach have been reduced since the implementation of a bird management plan to deter gulls from using the surrounding areas.
Spatial representation	1 site.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Santa Barbara County Public Health Dept. (SBCPHD) methods.
Potential Source(s) of Pollutant	Pasture Lands, Agriculture, Nonpoint and natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded. This conclusion is based on the staff findings that: <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical.

Region 3: Pacific Ocean at Arroyo Quemado Beach (Santa Barbara County + Total Coliform)

6. Standard methods were used.

7. Other water body information considered includes age of the data.

In recently collected data, none of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.

Region 3: Pacific Ocean at Butterfly Beach (Santa Barbara County)

Total Coliform

Water Body	Pacific Ocean at Butterfly Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Used Santa Barbara County Environmental Health Dept. Data, QA/QC .
Linkage between measurement endpoint and beneficial use or standard	Total Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable. AB 411 standards are applicable.
Water Body-specific Information	Data age = 1-2 years old (1/3/00-4/23/01). Recent data collected between April 15, 2002 and December 2, 2002.
Data used to assess water quality	Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for: None. Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 2/7-3/1/00; 2/5-3/6/01. Recent data collected between April and December, 2002: 34 samples, 0% exceeding the AB 411 standards. A DNA study was conducted to determine the source of the previously high bacteria densities. The results of the study showed that avian sources accounted for 79% of the elevated bacteria, 52% was attributed to gulls alone. The balance of DNA was from wildlife (18%) and domestic (3%) sources. Bacteria densities on the beach have been reduced since the implementation of a bird management plan to deter gulls from using the surrounding areas.
Spatial representation	1 site.
Temporal representation	Weekly sampling. Recent data collected between April and December, 2002: approximately weekly sampling.
Data type	Numerical data.
Use of standard method	Used Santa Barbara County Environmental Health Dept. Data methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded. This conclusion is based on the staff findings that: 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been apply to the water body.

Region 3: Pacific Ocean at Butterfly Beach (Santa Barbara County)

Total Coliform

- 4. Water quality standard used is applicable.
- 5. Data are numerical.
- 6. Standard methods were used.
- 7. Other water body- or site-specific information including the age of the data were considered.

In recent sampling, none of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.

Region 3: Pacific Ocean at Capitola Beach (Santa Cruz County)

Fecal and Total Coliform

Water Body	Pacific Ocean at Capitola Beach (Santa Cruz County)
Stressor/Media/Beneficial Use	Fecal and Total Coliform/Water/ REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Cruz County Environmental Health Dept. QA/QC .
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform Ocean Plan Standards are linked to REC- 1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan Standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-3 years old (4/29/99 - 5/30/01).
Data used to assess water quality	Capitola Beach (0240): Fecal Coliform Objective (>10% of samples in 60 days exceed 400 per 100 ml) exceeded for: 2/14-4/15/00. Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for: 4/15-5/9/00; 1/8-2/5/01; 2/5-3/6/01.
Spatial representation	14 sites.
Temporal representation	For Capitola Beach; weekly sampling (with a few weeks missing): For remaining sites: Highly variable.
Data type	Numerical data.
Use of standard method	Santa Cruz County Environmental Health Dept. methodology.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacific Ocean at Carpinteria City Beach (Santa Barbara Coun + Fecal and Total Coliform

Water Body	Pacific Ocean at Carpinteria City Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal and Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1..
Water Body-specific Information	Data age = 1-4 years old (6/22/98-4/23/01).
Data used to assess water quality	Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 1/2/01-2-26-01. Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 1/3-1/31/00; 2/7-3/6/00; 1/2/01-1/29/01; 2/20-3/12/01.
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. Methodology.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses have been apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacific Ocean at Carpinteria State Beach- Carpinteria Creek + Fecal and Total Coliform

Water Body	Pacific Ocean at Carpinteria State Beach- Carpinteria Creek Mouth (Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal and Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. data, QA/QC methodology.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1 - 5 years old (3/10/97-4/23/01).
Data used to assess water quality	Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 12/1/97-1/27/98; 7/6-8/31/98; 9/8-11/2/98; 1/4/99-2/22/99; 1/16-2/26/01. Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 12/1-12/29/97; 1/5-27/98; 2/9-3/9/98; 3/30-4/27/98; 5/26-6/22/98; 7/6-7/27/98; 8/3-31/98; 9/8-28/98; 11/2-11/30/98; 1/4-25/99; 3/15-4/14/99; 5/3-6/1/99; 2/17-3/6/00; 1/2-21/01; 2/5-3/6/01.
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methodology.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered.

Region 3: Pacific Ocean at Carpinteria State Beach- Carpinteria Creek + Fecal and Total Coliform

Many the water quality measurements exceeded the water quality standard.
The staff confidence that standards were exceeded is moderate.

Region 3: Pacific Ocean at City College Beach (Leadbetter Beach) Virus

Water Body	Pacific Ocean at City College Beach (Leadbetter Beach)
Stressor/Media/Beneficial Use	Virus/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	No QAPP
Linkage between measurement endpoint and beneficial use or standard	Virus with Bacteria WQOs are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	These water bodies are already covered by the existing 303(d) list. Bacteria and pathogen improvements recommended through TMDLs for these waters will also result in virus improvement.
Water Body-specific Information	Data was not presented.
Data used to assess water quality	Data was not presented.
Spatial representation	Data was not presented.
Temporal representation	Data was not presented.
Data type	Data was not presented.
Use of standard method	An approved method was not used.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be included on the 303(d) list because the water body is on an existing list for bacteria and pathogens.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The evaluation guideline used to interpret narrative water quality standards is inadequate. 2. Non-standard methods were used. 3. Other water body information considered is unknown. <p>It is unknown whether any of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is extremely low.</p>

Region 3: Pacific Ocean at Cowell Beach (Santa Cruz County)

Fecal coliform

Water Body	Pacific Ocean at Cowell Beach (Santa Cruz County)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Cruz County Environmental Health Dept. data, QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform WQOs are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-4 years old (10/2/98 - 5/30/01).
Data used to assess water quality	<p>Cowell @ Stairs (0494): Fecal Coliform Objective (Geometric mean exceed 200 per 100 ml in 30 days) exceeded for: 8/3-8/30/99; 9/7-10/5/99; Fecal Coliform Objective (>10% of samples in 60 days exceed 400 per 100 ml) exceeded for: 4/14-6/13/00. Cowell Beach (0490): Fecal Coliform Objective (Geometric mean exceed 200 per 100 ml in 30 days) exceeded for: 8/30-9/27/99. Fecal Coliform Objective (>10% of samples in 60 days exceed 400 per 100 ml) exceeded for: 4/17-6/13/00.</p> <p>For Cowell @ Stairs and Cowell Beach; weekly sampling (with a few weeks missing). For remaining sites: highly variable.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Cruz County Health Department.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered.

Region 3: Pacific Ocean at Cowell Beach (Santa Cruz County)

Fecal coliform

A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.

Region 3: Pacific Ocean at East Beach (mouth of Mission Creek, Santa + Total Coliform

Water Body	Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)
Stressor/Media/Beneficial Use	Total Coliform/Water/Ocean Plan Shellfish Harvest, REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Public Health Dept. (SBCPHD) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Total Coliform linked to Shellfish Harvest and REC-1.
Utility of measure for judging if standards or uses are not attained	Assembly Bill 411 Beach Posting is applicable to Shellfish Harvest and REC-1.
Water Body-specific Information	Data age = 1- 6 years.
Data used to assess water quality	262 bacteria samples, 181 samples exceeding (69%) WQO.
Spatial representation	1 site.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Santa Barbara County Public Health Dept. (SBCPHD) methods.
Potential Source(s) of Pollutant	Urban Runoff, Non point sources, Unknown sources, Agriculture.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Pacific Ocean at East Beach (mouth of Mission Creek, Santa + Fecal Coliform

Water Body	Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/Ocean Plan REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Public Health Dept. (SBCPHD) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform Ocean Plan standard is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Assembly Bill Beach 411 Posting is applicable to REC-1.
Water Body-specific Information	Data age = 1-6 years old.
Data used to assess water quality	262 bacteria samples, 160 samples exceeding (61%) WQO.
Spatial representation	1 site.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Santa Barbara County Public Health Dept. (SBCPHD) methods.
Potential Source(s) of Pollutant	Urban Runoff, Agriculture, Natural Source, Non point sources and unknown sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p><i>This conclusion is based on the staff findings that:</i></p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p><i>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</i></p>

Region 3: Pacific Ocean at East Beach (mouth of Mission Creek, Santa + Virus

Water Body	Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)
Stressor/Media/Beneficial Use	Virus/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	QAPP was not used.
Linkage between measurement endpoint and beneficial use or standard	Virus correlated to bacteria indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	These water bodies are already covered by the existing 303(d) list. Bacteria and pathogen improvements recommended through TMDLs for these waters will also result in virus improvement.
Water Body-specific Information	Unknown.
Data used to assess water quality	Unknown.
Spatial representation	Unknown.
Temporal representation	Unknown.
Data type	Unknown.
Use of standard method	An approved methodology was not used.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be included on the 303(d) list because the water body is on an existing list for bacteria and pathogens.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of inadequate quality.2. The evaluation guideline used to interpret narrative water quality standards is inadequate.3. Non-standard methods were used.4. Other water body information considered is unknown. <p>It is unknown whether any of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is extremely low.</p>

Region 3: Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa + Total Coliform

Water Body	Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)
Stressor/Media/Beneficial Use	Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-5 years old (4/7/97 - 4/23/01).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 1/5-3/2/98; 5/4-6/29/98; 3/1-4/26/99.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 12/1-29/97; 1/5-27/98; 2/2-3/2/98; 3/9-4/6/98; 4/13-5/11/98; 6/1-29/98; 8/3-31/98; 10/12-11/9/98; 3/15-4/12/99; 2/2-3/1/00; 2/5-26/01; 3/6-26/01.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standard for total coliform are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of water quality measurements exceeded the water</p>

Region 3: Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa + Total Coliform

quality standard for total coliform. The staff confidence that standards were exceeded is moderate.

Region 3: Pacific Ocean at El Capitan Beach (Santa Barbara County)

Fecal and Total Coliform

Water Body	Pacific Ocean at El Capitan Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal and Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Used Santa Barbara County Environmental Health Dept. QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-6 years old (9/4/96 - 4/23/01).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: none.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 12/1-29/97; 2/2-3/2/98; 8/17-9/14/98; 1/24-2/22/00; 1/29-2/26/01; 3/6-26/01.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Used Santa Barbara County Environmental Health methodology.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacific Ocean at Gaviota Beach (Mouth of Canada de la Gavio + Total Coliform

Water Body	Pacific Ocean at Gaviota Beach (Mouth of Canada de la Gaviota Creek)
Stressor/Media/Beneficial Use	Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform Ocean Plan standards is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable.
Water Body-specific Information	Data age = 1-5 years old (3/10/97 - 4/23/01).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 5/5-6/30/97; 3/8-5/3/99; 1/31-3/27/00; 7/31-9/28/00.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 4/21-5/19/97; 6/2-30/97; 11/3-12/1/97; 1/5-2/2/98; 6/15/98-9/21/98; 10/12/98-12/7/98; 1/4-27/99; 3/15-4/14/99; 6/22-7/19/99; 8/16-9/13/99; 1/31-3/1/00; 3/6/00 [>10000]; 5/22/00-8/16/00; 9/5-10/30/00; 11/27-12/26/00; 1/2/01-4/11/01.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methodology.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standard for total coliform are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered.

Region 3: Pacific Ocean at Gaviota Beach (Mouth of Canada de la Gavio + Total Coliform

An adequate number of water quality measurements exceeded the water quality standard for total coliform. The staff confidence that standards were exceeded is moderate.

Region 3: Pacific Ocean at Goleta Beach (Santa Barbara County)

Fecal and Total Coliform

Water Body	Pacific Ocean at Goleta Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal and Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Used Santa Barbara County Environmental Health Dept. QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-5 years old (1/27/97 - 4/23/01).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 9/8-11/2/98; 2/5-4/2/01.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 2/2-3/2/98; 3/15-4/14/99; 2/7-3/8/00; 1/4-29/01; 2/5-28/01; 3/6-8/01.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methodology.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacific Ocean at Guadalupe Dunes (Santa Barbara County)

Total coliform

Water Body	Pacific Ocean at Guadalupe Dunes (Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal and Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-5 years old (1/27/97- 4/23/0).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: none.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 6/9-7/7/97; 6/29-7/27/98; 8/2-30/99; 7/5-31/00; 9/5-10/2/00; 2/12-3/12/01.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methodology.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacific Ocean at Hammonds Beach (Santa Barbara County)

Fecal Coliform

Water Body	Pacific Ocean at Hammonds Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-5 years old (1/6/97 - 4/23/01).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 1/27-3/23/98; 2/22-4/19/00.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 1/6-2/3/97; 3/3-31/97; 12/1-29/97; 2/2-3/2/98; 3/9-4/6/98; 10/12-11/9/98; 1/31-2/28/00; 2/5-3/6/01.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standard for fecal coliform are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of water quality measurements exceeded the water quality standard for fecal coliform. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

Fecal Coliform

Water Body	Pacific Ocean at Hope Ranch Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-5 years old (1/6/97- 4/23/01).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 2/2-3/30/98; 1/18-3/13/00.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 2/3-3/3/97; 12/1-29/97; 2/2-3/2/98; 11/30-12/28/98; 3/15-4/14/99; 10/11-11/8/99; 1/3-31/00; 1/31-2/28/00; 3/6/00; 4/17/00 [>10,000]; 10/30-11/27/00; 1/2-29/01; 2/5-26/01.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methodology.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standard for fecal coliform are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered.

Region 3: Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

Fecal Coliform

An adequate number of water quality measurements exceeded the water quality standard for fecal coliform. The staff confidence that standards were exceeded is moderate.

Region 3: Pacific Ocean at Jalama Beach (Santa Barbara County)

Fecal Coliform

Water Body	Pacific Ocean at Jalama Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/Ocean Plan Shellfish Harvest and REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Public Health Dept. (SBCPHD) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform Ocean Plan standard is linked to Shellfish Harvest and REC-1.
Utility of measure for judging if standards or uses are not attained	Assembly Bill Beach 411 Posting is applicable to Shellfish Harvest and REC-1.
Water Body-specific Information	Data age = 1-5 years old.
Data used to assess water quality	222 bacteria samples, 111 samples exceeding (50%) WQO.
Spatial representation	1 site.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Santa Barbara County Public Health Dept. (SBCPHD) methods.
Potential Source(s) of Pollutant	Pasture Lands, Agriculture, Nonpoint and natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Pacific Ocean at Jalama Beach (Santa Barbara County)

Total Coliform

Water Body	Pacific Ocean at Jalama Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Total Coliform/Water/Ocean Plan Shellfish Harvest and REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Public Health Dept. (SBCPHD) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Total Coliform Ocean Plan WQO is linked to Shellfish Harvest and REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan WQO is applicable to Shellfish Harvest and REC-1.
Water Body-specific Information	Data age = 1-5 years old.
Data used to assess water quality	222 bacteria samples, 118 samples exceeding (53%) WQO.
Spatial representation	1 site.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Santa Barbara County Public Health Dept. (SBCPHD) methods.
Potential Source(s) of Pollutant	Pasture Lands, Agriculture, Nonpoint and natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate.2. The data exhibited sufficient temporal coverage.3. Beneficial uses apply to the water body.4. Water quality standard used is applicable.6. Standard methods were used.7. Other water body information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Pacific Ocean at Leadbetter Beach (Santa Barbara County)

Fecal and Total Coliform

Water Body	Pacific Ocean at Leadbetter Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal and Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-5 years old (1/6/97 - 4/23/01).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 12/2/96- 1/27/97; 11/3-12/29/97; 2/2-3/30/98.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 1/6-1/27/97; 11/3-12/1/97; 2/2-3/2/98; 11/1-29/99; 2/7-3/8/00; 2/12-3/12/01.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling (with the exception of a few weeks).
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methodology.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacific Ocean at New Brighton Beach (Santa Cruz County) Total Coliform

Water Body	Pacific Ocean at New Brighton Beach (Santa Cruz County)
Stressor/Media/Beneficial Use	Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Cruz County Environmental Health Dept. QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-3 years old (5/26/99 - 10/31/01).
Data used to assess water quality	Fecal Coliform Objective (>10% of samples in 60 days exceed 400 per 100 ml) exceeded for: None. Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for: 10/2-10/31/00.
Spatial representation	1 site.
Temporal representation	Weekly sampling (with a few weeks missing).
Data type	Numerical data.
Use of standard method	Santa Cruz County Environmental Health Dept. methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacific Ocean at Ocean Beach (Santa Barbara County)

Total and Fecal Coliform

Water Body	Pacific Ocean at Ocean Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Total and Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Total and Fecal Coliform Ocean Plan standard is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable.
Water Body-specific Information	Data age = 1-5 years old (4/7/97- 4/16/01).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 10/12-12/7/98; 3/15-5/10/99.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 1/5-2/2/98; 1/27-2/23/98; 5/4-6/1/98; 6/15-8/17/98; 10/5-11/30/98; 1/4-2/1/99; 3/8-6/28/99; 8/2-30/99; 9/7-10/4/99; 2/28/00 [>10000].</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standard are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered.

Region 3: Pacific Ocean at Ocean Beach (Santa Barbara County)
Total and Fecal Coliform

An adequate number of water quality measurements exceeded the water quality standard for total coliform. The staff confidence that standards were exceeded is moderate.

Region 3: Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)

Fecal Coliform

Water Body	Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Cruz County Environmental Health Dept. QA/QC methodology.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-3 years old (5/5/99 - 5/30/01).
Data used to assess water quality	Fecal Coliform Objective (>10% of samples in 60 days exceed 400 per 100 ml) exceeded for: 2/23-4/26/00. Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for: Insufficient data.
Spatial representation	1 site.
Temporal representation	Weekly sampling (with a few weeks missing).
Data type	Numerical data.
Use of standard method	Santa Cruz County Environmental Health Dept. methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacific Ocean at Point Rincon (Mouth of Rincon Creek, Santa + Fecal and Total Coliform

Water Body	Pacific Ocean at Point Rincon (Mouth of Rincon Creek, Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal and Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. QA/QC methodology.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-5 years old (5/5/97- 4/23/01).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 6/23-8/18/97; 11/3-12/29/97; 5/18-8/17/98; 1/19-3/15/99; 3/6-5/1/00.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 5/13/97- 8/11/97; 10/27- 11/17/97; 12/1-29/97; 1/5/98- 10/26/98 (all); 1/4-2/1/99; 3/15-4/12/99; 7/19-8/16/99; 10/18-11/15/99; 1/31-2/28/00; 3/6/00 [>10000]; 10/2-30/00; 2/12-3/8/01.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered.

Region 3: Pacific Ocean at Point Rincon (Mouth of Rincon Creek, Santa + Fecal and Total Coliform

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 3: Pacific Ocean at Refugio Beach (Santa Barbara County)

Total Coliform

Water Body	Pacific Ocean at Refugio Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. QA/QC methodology.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-5 years old (3/10/97- 4/23/01).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 10/4-11/29/99; 2/5-3/26/01.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 6/2-30/97; 12/1-29/97; 1/5/98-5/4/98; 6/1-29/98; 8/3/98-11/30/98; 3/1-29/99; 4/5-5/3/99; 6/28-8/30/99; 10/25-11/22/99; 1/31-3/1/00; 3/6/00 [>10000]; 6/5-7/5/00; 2/5- 3/26/01.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standard for total coliform are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered.

Region 3: Pacific Ocean at Refugio Beach (Santa Barbara County)

Total Coliform

An adequate number of water quality measurements exceeded the water quality standard for total coliform. The staff confidence that standards were exceeded is moderate.

Region 3: Pacific Ocean at Rio Del Mar (Santa Cruz County)

Fecal and Total Coliform

Water Body	Pacific Ocean at Rio Del Mar (Santa Cruz County)
Stressor/Media/Beneficial Use	Fecal and Total Coliform/Water/Ocean Plan Water Contact Standards and REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Cruz County Environmental Health Dept. QA/QC methodology.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform Ocean Plan standards are linked to REC-1 .
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable the REC-1.
Water Body-specific Information	Data age = 1- 4 years old (1/5/98 - 5/30/01).
Data used to assess water quality	Rio Del Mar Beach at Aptos Creek Mouth: Fecal Coliform Objective (>10% of samples in 60 days exceed 400 per 100 ml) exceeded for: 9/7-11/18/99; 11/18/99-1/10/00. Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for: 12/11/00-1/8/01; 1/29/01-2/26/01.
Spatial representation	7 sites.
Temporal representation	For Rio Del Mar Beach @ Aptos Creek Mouth; weekly sampling (with a few weeks missing). For remaining sites: Highly variable.
Data type	Numerical data.
Use of standard method	Santa Cruz County Environmental Health Dept.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacific Ocean at Sands Beach - Coal Oil Point (Santa Barbar + Total Coliform

Water Body	Pacific Ocean at Sands Beach - Coal Oil Point (Santa Barbara County)
Stressor/Media/Beneficial Use	Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. data, QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-8 years old (10/21/96- 4/25/01).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: none.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 11/18-12/16/96; 12/29/97-1/27/98; 2/2-3/2/98; 2/7-3/6/00; 2/5-3/6/01.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacific Ocean at Twin Lakes Beach (Santa Cruz County)

Fecal and Total Coliform

Water Body	Pacific Ocean at Twin Lakes Beach (Santa Cruz County)
Stressor/Media/Beneficial Use	Fecal and Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Cruz County Environmental Health Dept. QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-3 years old (4/26/99 - 5/30/01).
Data used to assess water quality	Fecal Coliform Objective (Geometric mean exceed 200 per 100 ml in 30 days) exceeded for 1/20-2/27/00 (>10% of samples in 60 days exceeded 400 per 100 ml) exceeded for: 9/7-11/18/99; 11/18/99-1/10/00. Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for: 1/29-2/26/01.
Spatial representation	1 site.
Temporal representation	Weekly sampling (with a few weeks missing).
Data type	Numerical data.
Use of standard method	Santa Cruz County Environmental Health Dept. methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Pajaro River

Fecal Coliform

Water Body	Pajaro River
Stressor/Media/Beneficial Use	Fecal Coliform/Water/Basin Plan WQO
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 3-5 years old.
Data used to assess water quality	11 bacteria samples, 10 samples exceeding (90%) WQO.
Spatial representation	1 site.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Pasture lands, Agriculture, and natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Pennington Creek

Fecal Coliform

Water Body	Pennington Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 3-8 years old (samples taken from 6/1993 to 5/1999).
Data used to assess water quality	237 samples, 68 samples exceeding WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Quail Creek

Fecal Coliform

Water Body	Quail Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old.
Data used to assess water quality	6 bacteria samples, 4 samples exceeding (63%) WQO.
Spatial representation	1 sampling site.
Temporal representation	Spring and winter sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Pasture lands, Agriculture, and natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Quail Creek

Nitrate

Water Body	Quail Creek
Stressor/Media/Beneficial Use	Nitrate/Water/MUN
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Nitrate WQO is linked to MUN.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Municipal Drinking Water.
Water Body-specific Information	Data age = 3 years old (samples taken from 2/1/99 to 11/30/99).
Data used to assess water quality	6 samples, 4 samples exceeding.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited insufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the age of the data were considered. <p>An inadequate number of the water quality measurements collected to determine whether the water quality standard was exceeded. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Quail Creek Boron

Water Body	Quail Creek
Stressor/Media/Beneficial Use	Boron/Water/Agricultural Water Supply
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Boron WQO is linked to Agricultural Water Supply.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Agricultural Water Supply.
Water Body-specific Information	Data age = 3 years old (samples taken from 7/1999 to 11/1999).
Data used to assess water quality	7 samples, 1 sample exceeding WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown; may be natural condition.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Quail Creek

Dissolved Oxygen

Water Body	Quail Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 2/1/1999 to 2/10/2000; over 8 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 11 samples, 1 sample exceeding.
Spatial representation	2 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Salinas Reclamation Canal

Fecal Coliform

Water Body	Salinas Reclamation Canal
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old.
Data used to assess water quality	37 bacteria samples, 33 samples exceeding (89%) WQO.
Spatial representation	3 Stations.
Temporal representation	Monthly sampling events
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Urban runoff, Pasture Lands, Natural Sources and Agriculture.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Salinas Reclamation Canal

Dissolved Oxygen

Water Body	Salinas Reclamation Canal
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 2/1/1999 to 2/10/2000; over 27 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 39 samples, 17 samples exceeding.
Spatial representation	3 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Salinas Reclamation Canal

Nitrate

Water Body	Salinas Reclamation Canal
Stressor/Media/Beneficial Use	Nitrate/Water/Drinking Water
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Nitrate WQO is linked to MUN.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to MUN.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 2/1/1999 to 2/10/2000).
Data used to assess water quality	34 samples with 13 samples exceeding.
Spatial representation	2 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Salinas River (lower, estuary to near Gonzales Rd crossing, + Dissolved Oxygen

Water Body	Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 309.10 and 309.20)
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is linked to Aquatic Life.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 2/1/1999 to 5/15/2000; over 29 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 64 samples with 3 samples exceeding.
Spatial representation	4 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 3: Salinas River (lower, estuary to near Gonzales Rd crossing, + Fecal Coliform

Water Body	Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 309.10 and 309.20)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old [samples taken from 2/99 to 2/00; 13 sampling dates (some sampling dates have multiple samples)].
Data used to assess water quality	54 samples, 14 samples exceeding WQO.
Spatial representation	4 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Salinas River (lower, estuary to near Gonzales Rd crossing, + Boron

Water Body	Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 309.10 and 309.20)
Stressor/Media/Beneficial Use	Boron/Water/Agricultural Water Supply
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP)
Linkage between measurement endpoint and beneficial use or standard	Boron WQO is linked to Agricultural Water Supply.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Agricultural Water Supply.
Water Body-specific Information	Data age = 2-3 years old [samples taken from 7/1999 to 5/2000; 12 sampling dates (some sampling dates have multiple samples)].
Data used to assess water quality	13 samples, 4 samples exceeding WQO.
Spatial representation	4 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown; may be natural condition.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Salinas River (middle, near Gonzales Rd crossing to confluence + Dissolved Oxygen

Water Body	Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 2/2/1999 to 4/24/2000; over 27 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 51 samples with 5 exceedences.
Spatial representation	3 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 3: Salinas River (middle, near Gonzales Rd crossing to confluence + Fecal Coliform

Water Body	Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 2/1999 to 4/2000; 15 sampling dates).
Data used to assess water quality	15 samples, 2 samples exceeding WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Salinas River (upper, confluence of Nacimiento River to San + Chloride

Water Body	Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)
Stressor/Media/Beneficial Use	Chloride/Water/MUN and Agriculture
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Chloride WQO is linked to Agriculture and MUN.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to MUN and Agriculture.
Water Body-specific Information	Data age = 2-3 years old.
Data used to assess water quality	42 water samples, 42 samples exceeding (100%) WQO.
Spatial representation	3 Stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Agriculture, Urban Runoff, Pasture Lands.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Salinas River (upper, confluence of Nacimiento River to San + Dissolved Oxygen

Water Body	Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 3-5 years old (samples taken from 2/2/1999 to 5/15/2000; over 16 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 29 samples with 4 samples exceeding.
Spatial representation	3 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list for dissolved oxygen because applicable water quality standard is not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard for dissolved oxygen. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Salinas River (upper, confluence of Nacimiento River to San + Sodium

Water Body	Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)
Stressor/Media/Beneficial Use	Sodium/water/Agriculture and MUN
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Sodium is linked to Agriculture and MUN.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Agriculture and MUN.
Water Body-specific Information	Data age = 2-3 years old
Data used to assess water quality	32 water samples, 32 samples exceeding (100%) WQO.
Spatial representation	3 Stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Agriculture, Urban Runoff, Pasture Lands.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate, quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Salinas River (upper, confluence to Nacimiento River to Mar + Fecal Coliform

Water Body	Salinas River (upper, confluence to Nacimiento River to Margarita Reservoir)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 3-5 years old (samples taken from 2/1999 to 2/2000; 7 sampling dates).
Data used to assess water quality	7 samples, 1 sample exceeding WQO.
Spatial representation	4 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that: The data exhibited insufficient spatial and temporal coverage.</p>

Region 3: Salinas River near Chualar

Sulfate

Water Body	Salinas River near Chualar
Stressor/Media/Beneficial Use	Sulfate/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	USGS QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Sulfate WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 1-5 years old (1997-2001).
Data used to assess water quality	16 samples, 3 samples exceeding WQO.
Spatial representation	One segment of river near Chualar, CA (Represents only one location on Salinas River.).
Temporal representation	16 samples collected over 5 years.
Data type	Numerical data.
Use of standard method	USGS methods were used.
Potential Source(s) of Pollutant	Unknown; may be natural condition.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: San Antonio Creek (San Antonio Watershed)

Boron

Water Body	San Antonio Creek (San Antonio Watershed)
Stressor/Media/Beneficial Use	Boron/Water/Agricultural Water Supply
Data quality assessment. Extent to which data quality requirements met.	USGS QA/QC
Linkage between measurement endpoint and beneficial use or standard	Boron WQO is linked to Agricultural Water Supply.
Utility of measure for judging if standards or uses are not attained	WQO is applicable Agricultural Water Supply.
Water Body-specific Information	Data age = 1-4 years old (1998-2001).
Data used to assess water quality	6 samples, 4 samples exceeding WQO.
Spatial representation	One station.
Temporal representation	Winter, Spring, and Summer for 1998-2001 (6 sampling events).
Data type	Numerical data.
Use of standard method	USGS methods were used.
Potential Source(s) of Pollutant	Unknown, may be natural condition.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>In the review of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited insufficient spatial and temporal coverage.3. Beneficial uses apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively low number of the water quality measurements were collected to determine whether the water quality standard was exceeded. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: San Antonio River

Fecal Coliform

Water Body	San Antonio River
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP)
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 3-5 years old. (samples taken from 2/1999 to 5/2000; 16 sampling dates).
Data used to assess water quality	16 samples, 4 samples exceeding WQO.
Spatial representation	1 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited insufficient spatial and sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: San Benito River

Dissolved Oxygen

Water Body	San Benito River
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 4-5 years old (samples taken from 12/18/1997 to 12/16/1998; over 15 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 15 samples, 0 samples exceeding.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 3: San Benito River

Fecal Coliform

Water Body	San Benito River
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 4-5 years old (samples taken from 12/1997 to 12/1998; 12 sampling dates).
Data used to assess water quality	12 samples, 5 samples exceeding WQO.
Spatial representation	2 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 3: San Bernardo Creek

Fecal Coliform

Water Body	San Bernardo Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 3-9 years old (samples taken from 6/1993 to 5/1999).
Data used to assess water quality	198 samples, 90 samples exceeding WQO.
Spatial representation	2 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: San Bernardo Creek

Dissolved Oxygen

Water Body	San Bernardo Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 4-9 years old (samples taken from 6/8/1993 to 5/4/1998; over 190 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 355 samples, 15 samples exceeding.
Spatial representation	2 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list for dissolved oxygen because applicable water quality standard is not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: San Bernardo Creek

Dissolved Oxygen

An inadequate number of the water quality measurements exceeded the water quality standard for dissolved oxygen. The staff confidence that standards were not exceeded is high.

Region 3: San Lorenzo Creek

Fecal Coliform

Water Body	San Lorenzo Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old.
Data used to assess water quality	15 bacteria samples, 9 samples exceeding (60%). WQO, Station LOK 15 samples exceeding (100%).
Spatial representation	1 site.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Agriculture, Urban Runoff, Pasture Lands and Natural Sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>All number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 3: San Lorenzo Creek

Boron

Water Body	San Lorenzo Creek
Stressor/Media/Beneficial Use	Boron/Water/Agricultural Water Supply
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Boron WQO is linked to Agricultural Water Supply.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Agriculture Water Supply.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 7/1999 to 2/2000).
Data used to assess water quality	10 samples, 10 samples exceeding WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP).
Potential Source(s) of Pollutant	Unknown; may be natural condition.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient temporal coverage.3. Beneficial uses apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: San Lorenzo River Lagoon

Sediment-Siltation

Water Body	San Lorenzo River Lagoon
Stressor/Media/Beneficial Use	Sediment-Siltation/Water/Aquatic life
Data quality assessment. Extent to which data quality requirements met.	Unknown.
Linkage between measurement endpoint and beneficial use or standard	Sedimentation-Siltation is linked to the aquatic life beneficial use.
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	The original data appears to have been based on generic information that was not truly indicative of the conditions in the San Lorenzo River Lagoon. The City of Santa Cruz's 1989 study of the lower San Lorenzo River, which includes the Lagoon Management Plan, has established that problems within the lagoon are associated with the breaching of the sand bar that becomes established between the lagoon and Monterey Bay, and are not due to the delivery of sediment from upstream sources.
Spatial representation	Water Street in Santa Cruz to Monterey Bay at the Boardwalk amusement park.
Temporal representation	The study of the Lagoon was completed in 1989.
Data type	Non-numerical description of the Lagoons conditions.
Use of standard method	N/A
Potential Source(s) of Pollutant	The report describes the problem being associated with breaching the sand bar.
Alternative Enforceable Program	N/A
RWQCB Recommendation	Maintain Listing.
SWRCB Staff Recommendation	After reviewing the available information provided by the RWQCB and the recommendation, SWRCB staff concludes that the water body should be removed from the section 303(d) list because there was originally no information to support listing and currently there is no information available to assess if the problem due to a pollutant (upstream sediment sources).

Region 3: San Luis Obispo Creek below W. Marsh Street

Priority Organics

Water Body	San Luis Obispo Creek below W. Marsh Street
Stressor/Media/Beneficial Use	Priority Organics/Tissue/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC and TSMP
Linkage between measurement endpoint and beneficial use or standard	Priority Organics and PCBs MTRLs are linked to Fish Consumption.
Utility of measure for judging if standards or uses are not attained	CTR for MTRLs in freshwater is applicable to Fish Consumption.
Water Body-specific Information	<p>Change listing from Priority Organics to PCBs. The following water body information is based on PCB data.</p> <p>Data 3 - 12 years old, data collected at site (Goldfish tissue sample in 1990 and a composite sample of 20 whole fish in 1999), species present at site, one time sample event.</p>
Data used to assess water quality	2 composite sample, 2 samples exceeding (PCBs).
Spatial representation	Two samples (A composite of 20 fish and a goldfish tissue sample).
Temporal representation	One time sampling event in the winter of 1990 and one in the spring of 1999.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) and TSMP methods.
Potential Source(s) of Pollutant	Unknown Sources.
Alternative Enforceable Program	
RWQCB Recommendation	Change Listing from Priority Organics to PCBs. PCBs MTRLs exceedance in fish tissue.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be maintained on the list for Priority Organics until more information is collected to support the change in listing. There is insufficient data to change the listing from Priority Organics to PCBs. The PCB information submitted to change listing was based on only two fish tissue samples, one in 1992 and the other in 1999.</p> <p>The data exhibited insufficient temporal coverage. An inadequate amount of water quality measurements are available to make the determination to change the pollutant designation.</p>

Region 3: San Luisito Creek

Fecal Coliform

Water Body	San Luisito Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 3-9 years old (samples taken from 6/1993 to 5/1999).
Data used to assess water quality	207 samples, 85 samples exceeding.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Santa Barbara Channel/various sites

Total coliform, E. coli, Enterococcus, nitrite, phosphate, sulfate, tu +

Water Body	Santa Barbara Channel/various sites
Stressor/Media/Beneficial Use	Total coliform, E. coli, Enterococcus, nitrite, phosphate, sulfate, turbidity, Dissolved Oxygen Temperature, conductivity and pH/Water/REC-1, WILD, MAR.
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Creek Watchers (no QA Procedures).
Linkage between measurement endpoint and beneficial use or standard	Measurements are linked to Aquatic Life, REC-1 and MUN.
Utility of measure for judging if standards or uses are not attained	Guidelines were not provided, so there is no applicability to Beneficial Use. Insufficient data was collected. Only 4 samples were collected. In addition, QA procedures were not used.
Water Body-specific Information	Date age = 2 years old (collected from 2001-2002)
Data used to assess water quality	250 sample events.
Spatial representation	Unknown.
Temporal representation	Unknown.
Data type	Numerical.
Use of standard method	Standard methods were not used.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because data was collected in absent of QA/QC, standard methods and insufficient data.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of inadequate quality.2. Standard methods used in sample collection is unknown. <p>An inadequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded extremely low.</p>

Region 3: Santa Maria River

Dissolved Oxygen

Water Body	Santa Maria River
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen are linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is linked to Aquatic Life.
Water Body-specific Information	Data age = 1-2 years old (samples taken from 1/12/2000 to 2/28/2001, over 15 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 32 samples with 0 samples exceeding.
Spatial representation	3 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 3: Santa Maria River

Fecal Coliform

Water Body	Santa Maria River
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 1-2 years old.
Data used to assess water quality	33 bacteria samples, 17 samples exceeding (52%) WQO.
Spatial representation	3 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Pasture Lands, Urban Runoff, Agriculture, Natural Sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited adequate spatial and sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Santa Maria River

Nitrate

Water Body	Santa Maria River
Stressor/Media/Beneficial Use	Nitrate/Water/MUN
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Nitrate WQO is linked to MUN.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to MUN.
Water Body-specific Information	Data age = 1 year old.
Data used to assess water quality	23 water samples, 23 samples exceeding (100%) WQO.
Spatial representation	2-3 sites.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Urban Runoff, Agriculture and Pasture Lands.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Santa Maria River Estuary

Organochlorine

Water Body	Santa Maria River Estuary
Stressor/Media/Beneficial Use	Organochlorine/Sediment and Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP and TSMP
Linkage between measurement endpoint and beneficial use or standard	Sediment ERM-PEL guidelines are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs in sediment and tissue are applicable to Aquatic Life.
Water Body-specific Information	Data is 3-9 years old, data measured from site/water body, one sediment sample and a composite tissue sample of 20 stickleback fish, sediment sample collected in February 1993 and tissue sample collected in August 1999.
Data used to assess water quality	1 sediment sample, 1 tissue sample exceeding.
Spatial representation	Based on sediment sample and a tissue sample that is a composite of 20 fish.
Temporal representation	Samples collected from Winter and Summer, however one sample was collected in 1993 and the other in 1999.
Data type	Numerical data.
Use of standard method	BPTCP and TSMP methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedance in ERM-PELs in sediment and tissue.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the list. Data was collected from two different media taken 6 years apart with only one sample for each sediment and tissue.</p> <p>An inadequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is extremely low.</p>

Region 3: Selected sites in Monterey Bay

Nickel, chromium, arsenic

Water Body	Selected sites in Monterey Bay
Stressor/Media/Beneficial Use	Nickel, Chromium, Arsenic/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	1998 Master Thesis by Anuraag Gill
Linkage between measurement endpoint and beneficial use or standard	Metals in sediment are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Metals concentrations in sediments can impact Aquatic Life.
Water Body-specific Information	BPTCP protocol were used (used TEL, not PEL). Therefore insufficient data quality to list. Toxicity data was not available.
Data used to assess water quality	Unknown.
Spatial representation	Unknown.
Temporal representation	Unknown.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Natural geologic sources.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the list due to lack of QA/QC and standard methods used in the collection and processing of samples.</p> <p>An inadequate amount of the water quality measurements exceeding the water quality standard is unknown. The staff confidence that standards were exceeded is extremely low.</p>

Region 3: Sisquoc River

Dissolved Oxygen

Water Body	Sisquoc River
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 1-2 years old (samples taken from 1/12/2000 to 2/28/2001; over 16 sampling dates).
Data used to assess water quality	Dissolved Oxygen; 20 sample with 3 samples exceeding.
Spatial representation	2 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list for dissolved oxygen because applicable water quality standard is not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard for dissolved oxygen. The staff confidence that standards were not exceeded is high.</p>

Region 3: Soda Lake

Dissolved Oxygen

Water Body	Soda Lake
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 2 years old (samples taken from 1/11/2000 to 5/1/2000; over 6 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 7 samples with 4 samples exceeding.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because it can not be determined if applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that the data exhibited insufficient temporal coverage.</p>

Region 3: Tembladero Slough

Fecal Coliform

Water Body	Tembladero Slough
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old.
Data used to assess water quality	8 bacterial samples, 5 samples exceeding (63%) WQO.
Spatial representation	1 site.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Pasture Lands, Urban Runoff, Agriculture, Natural Sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate.2. The data exhibited sufficient temporal coverage.3. Beneficial uses apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Tembladero Slough

Dissolved Oxygen

Water Body	Tembladero Slough
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age 2-3 years old (samples taken from 3/1/1999 to 2/7/2000, over 12 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 11 samples, 1 sample exceeding.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Tequisquita Slough

Fecal Coliform

Water Body	Tequisquita Slough
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 4-5 years old.
Data used to assess water quality	16 bacteria samples, 10 samples exceeding (63%) WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Agriculture, Nonpoint Sources and Natural Sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Tequisquita Slough

Dissolved Oxygen

Water Body	Tequisquita Slough
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 4-5 years old (samples taken from 12/18/1997 to 12/16/1998; over 15 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 19 samples with 3 samples exceeding.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the list for dissolved oxygen because the applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standards for dissolved oxygen. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Upper Salinas River/tributaries

Temperature, Nutrients, Turbidity, Dissolved Oxygen

Water Body	Upper Salinas River/tributaries
Stressor/Media/Beneficial Use	Temperature, Nutrients, Turbidity, Dissolved Oxygen/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data was collected by the Las Tablas Resource Conservation District, however quality assurance information was not provided with the data. It is unknown if the measurements provided are reliable.
Linkage between measurement endpoint and beneficial use or standard	Measurements are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	The measurements can be compared to the water quality objectives in the Basin Plan.
Water Body-specific Information	
Data used to assess water quality	<p>Data are summarized by month. The summaries indicate that for the most part data do not exceed water quality standards. The summaries show that dissolved oxygen data might exceed standards for Atascadero Creek and upper Salinas River. However, no QA/QC was provided and it is unclear how the summaries were developed. Unsummarized data are not in the record.</p> <p>RWQCB CCAMP monitoring data for dissolved oxygen shows that water quality standards are not exceeded in this water body.</p>
Spatial representation	20 stations. 19 stations have 6 samples. Only one station has 10 samples. The data only included general water quality descriptions including temperature, nutrients, turbidity, and dissolved oxygen. Most stations only had one or two sampling events. The station with the highest number of samples had four sampling events.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	The methods used to collect the data are presented in the submittal but the methods are not referenced to standard methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list. There was not enough data to determine water quality conditions. In addition, quality assurance information was not provided.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the list due to lack of QA/QC and standard methods used in collection samples.</p> <p>An inadequate number of the water quality measurements were taken to</p>

Region 3: Upper Salinas River/tributaries
Temperature, Nutrients, Turbidity, Dissolved Oxygen

determine whether the water quality standards were exceeded. The staff confidence that standards were exceeded is extremely low.

Region 3: Uvas Creek

Fecal Coliform

Water Body	Uvas Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 4-5 years old (samples taken from 12/97 to 12/98).
Data used to assess water quality	7 samples, 2 samples exceeding.
Spatial representation	4 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited insufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is low.</p>

Region 3: Walters Creek

Fecal Coliform

Water Body	Walters Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 3-9 years old (samples taken from 6/1993 to 5/1999).
Data used to assess water quality	141 samples, 75 exceeding WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Warden Creek

Fecal Coliform

Water Body	Warden Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 3-6 years old (samples taken from 3/1996 to 4/1999).
Data used to assess water quality	292 samples, 110 samples exceeding.
Spatial representation	2 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Warden Creek

Dissolved Oxygen

Water Body	Warden Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	Exceedances of Basin Plan water quality objective in place for the protection of aquatic life.
Water Body-specific Information	Samples taken from 12/14/93 to 5/18/98 with over 168 sampling dates.
Data used to assess water quality	Dissolved Oxygen: 407 samples with 144 exceedances.
Spatial representation	2 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p><i>This conclusion is based on the staff findings that:</i></p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Watsonville River Metals (copper, zinc, lead)

Water Body	Watsonville River
Stressor/Media/Beneficial Use	Metals (copper, zinc, lead)/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Original data of unknown quality, newly submitted data of satisfactory to high quality.
Linkage between measurement endpoint and beneficial use or standard	Water column data directly comparable to numeric objectives for designated beneficial use.
Utility of measure for judging if standards or uses are not attained	Numeric data directly comparable to water quality objective.
Water Body-specific Information	Original data from Sept. 1994; new data (submitted in 2002) from early 1996 through May 2002.
Data used to assess water quality	Total water column copper, lead, and zinc. Out of 30 samples collected, none exceeded the water quality standards for these metals.
Spatial representation	Similar spatial coverage/locations as original 1994 sampling.
Temporal representation	Original listing on Sept. 1994 data only, new data cover multiple months of 6 years.
Data type	Numerical data.
Use of standard method	Original (1994) data = unknown. New data = yes (County, Water Authority, and RWQCB collected).
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 3: Watsonville Slough

Oil and Grease

Water Body	Watsonville Slough
Stressor/Media/Beneficial Use	Oil and Grease/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Original data of unknown quality, newly submitted data of satisfactory to high quality.
Linkage between measurement endpoint and beneficial use or standard	Water column data directly comparable to narrative objectives for designated beneficial use; numeric indicator similar to numeric criteria used by state of Florida.
Utility of measure for judging if standards or uses are not attained	Numeric data as indicator value for narrative objective.
Water Body-specific Information	Original data 5 samples from 1994 study; new data from February and May 2002.
Data used to assess water quality	23 samples all non-detect for Oil & Grease using EPA lab Method and acceptable detection limits.
Spatial representation	11 locations throughout slough system (10 locations used in 1994 watershed study).
Temporal representation	Original listing based on 4 monthly samples from Sept. – Dec. 1994; new data cover two months (February and May) of 2002.
Data type	Numerical data.
Use of standard method	Original (1994) data = unknown New data = RWQCB collected, Method for Oil & Grease, EPA Method 1664.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. The evaluation guideline used to interpret narrative water quality standards is adequate. 4. Data are numerical. 5. Standard methods were used. 6. Other water body- or site-specific information including the effects age of the data were considered.

Region 3: Watsonville Slough

Oil and Grease

All of the water quality measurements did not exceed the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 3: Zayante Creek Sedimentation-Siltation

Water Body	Zayante Creek
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data quality assurance procedures used. Assessment made of the consistency of methods used.
Linkage between measurement endpoint and beneficial use or standard	Geomorphological data linked to Aquatic Life protection
Utility of measure for judging if standards or uses are not attained	Sedimentation can directly affect aquatic life.
Water Body-specific Information	Data = 2 years (1998 and 1999), Samples collected from site.
Data used to assess water quality	Riffle/Run embeddedness = 45% samples exceed at Site 13a and 13b, 40% samples exceed at Site 13e, 54% samples exceed at Site Z-1, 47% samples exceed at Site Z-2, 39% samples exceed at Site Z-4, 42% samples exceed at Site Z-5, 46% samples exceed at Site Z-6. For Fine Sediments in Riffles = 40% samples exceed at Site 13b, 50% samples. Data showed impacts on fish population due to sedimentation/siltation in 1998 and 1999. exceed at Site 13c, 45% samples exceed at Site 13d, 38% samples exceed at Site Z-1, 34% samples exceed at Site Z-2. For D50: 37mm (minimum for a reach) = 12mm at Site Z-1, 14mm at Site Z-2, 24mm at Site Z-5, 30mm at Site Z-7.
Spatial representation	Zig-Zag sample design, 10 samples
Temporal representation	Late spring-early summer.
Data type	Numerical data.
Use of standard method	Standard methods were used.
Potential Source(s) of Pollutant	Improper/illegal grading of private roads and home sites, lack of vegetation around home sites, agriculture, residential use, roads and timber.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited adequate spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate.

Region 3: Zayante Creek Sedimentation-Siltation

6. Data are numerical.
7. Standard methods were used.
8. Other water body- information including riffle/run embeddedness and age of the data were considered.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate, uncertain on how to interpret riffle/run embeddedness.

Reference List for Region 3

Staff Report

California Regional Water Quality Control Board. Central Coast Region. 2001. Staff Report for the Regular Meeting of October 26, 2001. Subject: Changes to 303(d) List of Impaired Water Bodies. October 4, 2001.

Contacts

Al Haynes. San Lorenzo Valley Water District

California Department of Pesticide Regulation, 1001 I Street, P.O. Box 4015, Sacramento, CA 95812-4015

Chris Berry. City of Santa Cruz Water Department

Cindy H. Wu, Environmental Health Technician, Ocean Water Monitoring Program. Santa Barbara County Public Health Dept

Don Funk. Upper Salinas-Las Tablas Resource Conservation District/Upper Salinas Watershed Coalition

Eric Kingsley, Water Quality Specialist. Monterey Bay Aquarium

Jessica Altstatt. Santa Barbara Channel Keeper

Jill Carlson. Santa Barbara County Creek Watchers

John Hunt, Research Specialist.

Nina Gill. (Masters Thesis)

Patricia A Shiffer. United States Geological Survey

Southern California Alliance of Publicly Owned Treatment Works. 30200 Rancho Viejo Rd, Suite B, San Juan Capistrano, CA 92675

U.S. Department of the Air Force.

Regional Board Documents/Data

Al Haynes. San Lorenzo Water District

Brian Troutwein, Environmental Analyst. Environmental Defense Center

Chris Berry. City of Santa Cruz Water Department

Chris Rose. RWQCB #3

Danial Reid, Project Manager. Public Health Department, Environmental Health Services

Danial Reid, Project Manager. Santa Barbara County, Public Health Department, Environmental Health Services

David Smith. United States Environmental Protection Agency

Drew Bohan, Executive Director. Santa Barbara Channel Keeper

Heal the Ocean, September 13, 2001.

James Nelson, President Board of Directors. San Lorenzo Water District

Jodi Frediani, Executive Director. Citizens for Responsible Forest Management

Kevin Collins, Board President. Lompico Watershed Conservancy

Matt Fabry. RWQCB #3

Patricia Anderson, Associate Fishery Biologist. California Department of Fish and Game

Robert N. Tasto, Supervisor. Project Review and Water Quality Program, Marine Region, Department of Fish and Game,

Sharyn Main. South Coast Watershed Alliance

Southern California Alliance of Publicly Owned Treatment Works. 30200 Rancho Viejo Rd, Suite B, San Juan Capistrano, CA 92675

Stephen F. Mack, Water Supply Manager. City of Santa Barbara

University of Southern California. University of Southern California

Regional Water Quality Control Board

LOS ANGELES REGION (4)



SECTION 303 (d) LIST PROPOSALS

Page left blank intentionally.

Region 4: Avalon Beach-between BB restaurant and Tuna Club

Bacterial Indicators

Water Body	Avalon Beach-between BB restaurant and Tuna Club
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	42 samples, 7 samples exceeding.
Spatial representation	1 station: DHS (120) which is the same as DHS (126)99. This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	None.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Avalon Beach-between Pier and BB restaurant (1/3)

Bacterial Indicators

Water Body	Avalon Beach-between Pier and BB restaurant (1/3)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department.
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	43 samples, 14 samples exceeding
Spatial representation	1 station: DHS118. This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Avalon Beach-between Pier and BB restaurant (2/3)

Bacterial Indicators

Water Body	Avalon Beach-between Pier and BB restaurant (2/3)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department.
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	43 sample, 10 samples exceeding.
Spatial representation	1 station: DHS(119). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Avalon Beach-between storm drain and Pier (1/3)

Bacterial Indicators

Water Body	Avalon Beach-between storm drain and Pier (1/3)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial indicator densities data/beach postings and closure are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Beach postings and closure as a result of bacterial indicator data is applicable to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	17 samples exceeding standards out of 44 samples.
Spatial representation	1 station. This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Avalon Beach-between storm drain and Pier (2/3)

Bacterial Indicators

Water Body	Avalon Beach-between storm drain and Pier (2/3)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	43 samples, 17 samples exceeding.
Spatial representation	1 station: DHS(116). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Ballona Creek Silver

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	Silver/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Unknown
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Use protection.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are not a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Ballona Creek Trash

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	Trash/Water/Aquatic Life and REC-2
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	TMDL Completed.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region 4: Ballona Creek

Arsenic

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	Arsenic/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Unknown
Linkage between measurement endpoint and beneficial use or standard	MTRLs are not linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	MTRLs do not exist for arsenic and are not applicable to Aquatic Life.
Water Body-specific Information	Data was not presented.
Data used to assess water quality	Data was not presented.
Spatial representation	Data was not presented.
Temporal representation	Data was not presented.
Data type	Data was not presented.
Use of standard method	Data was not presented.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	Delist because there is no MTRL guideline for arsenic.
SWRCB Staff Recommendation	After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because MTRL guidelines cannot be used for protection of aquatic life.

Region 4: Ballona Creek

Chem A

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	Chem A/Tissue/Aquatic Life
Data quality assessment, Extent to which data quality requirements met.	QAPP
Linkage between measurement endpoint and beneficial use or standard	Chem A NAS guideline is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	NAS guidelines are applicable to Aquatic Life.
Water Body-specific Information	Unknown (not mentioned).
Data used to assess water quality	Number of samples for old data is unknown and new data was not presented.
Spatial representation	Unknown: old data and new data was not presented.
Temporal representation	Unknown: old data and new data was not presented.
Data type	Unknown: old data and new data was not presented.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	<i>Originally recommended for delisting. Revaluation resulted in a recommendation to maintain on the list until new or alternate comparison value is available.</i>
SWRCB Staff Recommendation	In the review of the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should not be removed from the section 303(d) list because the NAS guidelines are not outdated and remain a valid assessment tools.

Region 4: Ballona Creek

Copper

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	Copper/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Unknown.
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are not a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Ballona Creek

Lead

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	Lead/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Unknown
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Use protection.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are not a valid assessment guideline.
SWRCB Staff Recommendation	In the review of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Ballona Creek

TBT

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	TBT/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Unknown
Linkage between measurement endpoint and beneficial use or standard	There is not a valid assessment guideline for TBT in sediment.
Utility of measure for judging if standards or uses are not attained	There is not a valid assessment guideline for TBT in sediment.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because there is not a valid assessment guidelines for TBT.
SWRCB Staff Recommendation	After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because there is no valid assessment guideline for TBT in sediment.

Region 4: Ballona Creek

Dissolved Lead

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	Dissolved Lead/Water/Aquatic Life (warm water and freshwater, wildlife habitat)
Data quality assessment. Extent to which data quality requirements met.	Los Angeles County Stormwater Program.
Linkage between measurement endpoint and beneficial use or standard	Lead CTR criterion is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Lead CTR criterion is applicable.
Water Body-specific Information	Data is 1 - 5 years old.
Data used to assess water quality	38 water samples, 5 (13.2%) above chronic criterion.
Spatial representation	Samples collected spatially along the creek.
Temporal representation	Fall, Winter, Spring, Summer in different years.
Data type	Numerical data.
Use of standard method	Los Angeles County Stormwater Program methods.
Potential Source(s) of Pollutant	Nonpoint.
Alternative Enforceable Program	
RWQCB Recommendation	List due to 10% exceedance for dissolved lead.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season and age of the data were considered. <p>Some of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is low.</p>

Region 4: Ballona Creek Dissolved Copper

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	Dissolved Copper/Water/Aquatic Life (warm water and freshwater, wildlife habitat)
Data quality assessment. Extent to which data quality requirements met.	Los Angeles County Department of Public Works
Linkage between measurement endpoint and beneficial use or standard	Copper CTR criterion is linked to Aquatic life.
Utility of measure for judging if standards or uses are not attained	Copper CTR criterion is applicable.
Water Body-specific Information	Data 1-5 years old, data measured in waterbody, environmental conditions (winter, spring in different years).
Data used to assess water quality	38 water samples, 17 Sample exceeding acute criteria, 21 samples exceeding in chronic criteria.
Spatial representation	Samples were collected spatially along the creek.
Temporal representation	Fall, spring, winter, summer in different years.
Data type	Numerical data.
Use of standard method	LA County Stormwater Program methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, storm events and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Ballona Creek

Total Selenium

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	Total Selenium/Water/Aquatic Life (warm water, and wildlife habitat).
Data quality assessment. Extent to which data quality requirements met.	Los Angeles County Department of Public Works.
Linkage between measurement endpoint and beneficial use or standard	Selenium CTR is linked to Aquatic life.
Utility of measure for judging if standards or uses are not attained	Selenium water quality criterion from the CTR is applicable to Aquatic Life.
Water Body-specific Information	Data 3-5 years old, data measured in waterbody, environmental conditions is winter, spring in different years was considered.
Data used to assess water quality	25 water samples, 3 samples exceeding.
Spatial representation	Samples were collected spatially along the creek.
Temporal representation	Fall, spring, summer, winter in different years.
Data type	Numerical data.
Use of standard method	Los Angeles Department of Public Works methods.
Potential Source(s) of Pollutant	Nonpoint sources (Stormwater).
Alternative Enforceable Program	
RWQCB Recommendation	List due to 10% exceedances in total selenium.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, storm events and age of the data were considered. <p>Some of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is low.</p>

Region 4: Ballona Creek

Dissolved Zinc

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	Dissolved Zinc/Water/Aquatic Life (warm water and freshwater, wildlife habitat)
Data quality assessment. Extent to which data quality requirements met.	Los Angeles County Department of Public Works
Linkage between measurement endpoint and beneficial use or standard	Zinc CTR criterion is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR criterion is applicable to Aquatic Life.
Water Body-specific Information	Data 1-5 years old, environmental data measured at site, samples collected multiple seasons.
Data used to assess water quality	39 water samples, 5 water samples exceeded.
Spatial representation	Data was collected spatially along the creek.
Temporal representation	Fall, spring, winter, summer in different years.
Data type	Numerical data.
Use of standard method	Los Angeles Department of Public Works methods.
Potential Source(s) of Pollutant	Nonpoint sources (possible sources include urban and stormwater runoff).
Alternative Enforceable Program	
RWQCB Recommendation	List due to 10% exceedance for zinc.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Ballona Creek pH

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	pH/Water/Aquatic Life (warm freshwater habitat and wildlife habitat)
Data quality assessment. Extent to which data quality requirements met.	Los Angeles County Stormwater Program
Linkage between measurement endpoint and beneficial use or standard	pH WQO is linked Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data 1-5 years old, environmental data measured at site, samples collected during multiple seasons.
Data used to assess water quality	40 water samples, 5 water samples exceeding.
Spatial representation	Data was collected spatially along the creek.
Temporal representation	Fall and spring.
Data type	Numerical data.
Use of standard method	LA County Stormwater Program methods.
Potential Source(s) of Pollutant	Nonpoint sources (possible sources include urban and stormwater runoff).
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including season and age of the data were considered. <p>An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Ballona Creek Estuary

Aroclor

Water Body	Ballona Creek Estuary
Stressor/Media/Beneficial Use	Aroclor/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Aroclor MTRL not linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	MTRL is not applicable to Aquatic Life.
Water Body-specific Information	Data presented is 3-9 years old for Lead Chlordane DDE and PAH. There was no data presented for Aroclor. Data was measured in waterbody, Environmental conditions (fall, winter).
Data used to assess water quality	49 sediment samples were collected. The number Aroclor samples exceeding is unknown because data was not presented.
Spatial representation	Unknown.
Temporal representation	Fall/winter and different years.
Data type	Numerical data.
Use of standard method	BPTCP methods.
Potential Source(s) of Pollutant	Historical use of pesticides, stormwater runoff/aerial deposition from urban areas.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because it is listed for PCBs in tissue.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be listed on the 2002 section 303(d) list for Aroclor because the water body is already listed for PCBs. Aroclor is another name for polychlorinated biphenyls (PCB). This would result in a duplicate water body listing for the same pollutant.

Region 4: Ballona Creek Wetland

Arsenic

Water Body	Ballona Creek Wetland
Stressor/Media/Beneficial Use	Arsenic/Tissue/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	Arsenic MTRL is linked to Fish Consumption.
Utility of measure for judging if standards or uses are not attained	MTRL is applicable to Fish Consumption.
Water Body-specific Information	Data 6 years old, Environmental data measured at site/waterbody, Species present, one-time sample.
Data used to assess water quality	1 fish tissue sample, number exceeding samples is unknown.
Spatial representation	One sample only.
Temporal representation	One sample event.
Data type	Numerical data.
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Delist there is not a MTRL guideline for arsenic.
SWRCB Staff Recommendation	After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because there are no MTRL guidelines for arsenic.

Region 4: Burbank Western Channel

Cadmium

Water Body	Burbank Western Channel
Stressor/Media/Beneficial Use	Cadmium/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Quality assurance procedures followed by the City of Burbank are appropriate. All data quality procedures were met for the samples analyzed.
Linkage between measurement endpoint and beneficial use or standard	Cadmium water quality criterion in water is linked to Aquatic Life beneficial use.
Utility of measure for judging if standards or uses are not attained	Cadmium CTR water quality criterion is applicable.
Water Body-specific Information	Data age = 1 year, data was collected at the site, 15 samples were collected from summer 2001 through spring 2002.
Data used to assess water quality	15 water samples, 0 samples exceeding.
Spatial representation	2 sites.
Temporal representation	Samples were collected throughout the period from July 2001 - March 2002.
Data type	Numerical.
Use of standard method	Standard methods were used.
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Maintain Listing.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should remain on the section 303(d) list because there were an insufficient number of data points to determine if applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established for and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of season and age of the data were considered. <p>An inadequate number of the water quality measurements were collected to determine if water quality standard are not exceeded. The staff confidence that standards were not exceeded is low.</p>

Region 4: Calleguas Creek R9A, R9B, R10, R11, R12, R13 (was Conejo + Cadmium)

Water Body	Calleguas Creek R9A, R9B, R10, R11, R12, R13 (was Conejo Creek R1, R2, R3, R4)
Stressor/Media/Beneficial Use	Cadmium/Tissue/COMM BU
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are not a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Calleguas Creek R9A, R9B, R10, R11 (was Conejo Creek R1, R2 + Silver

Water Body	Calleguas Creek R9A, R9B, R10, R11 (was Conejo Creek R1, R2, R3, R4)
Stressor/Media/Beneficial Use	Silver/Tissue/COMM BU
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist EDLs are not a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Calleguas Creek R9A, R9B, R10, R11 (was Conejo Creek R1, R2 + Chromium

Water Body	Calleguas Creek R9A, R9B, R10, R11 (was Conejo Creek R1, R2, R3, R4)
Stressor/Media/Beneficial Use	Chromium/Tissue/COMM BU
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	Unknown
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are not a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Calleguas Creek R9A, R9B, R10, R11 (was Conejo Creek R1, R2 + Nickel

Water Body	Calleguas Creek R9A, R9B, R10, R11 (was Conejo Creek R1, R2, R3, R4)
Stressor/Media/Beneficial Use	Nickel/Tissue/COMM
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	Unknown
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the listing was based on EDLs which are not a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Calleguas Creek R9A, R9B, R10, R11, R13 (was Conejo Reach R + Dacthal

Water Body	Calleguas Creek R9A, R9B, R10, R11, R13 (was Conejo Reach R1, R2, R3, R4)
Stressor/Media/Beneficial Use	Dacthal/Tissue/COMM
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to COMM.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to COMM.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are not a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Calleguas Creek R9B (was part of Conejo Creek Reaches 1 and + Fecal Coliform

Water Body	Calleguas Creek R9B (was part of Conejo Creek Reaches 1 and 2)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons for 2 years.
Data used to assess water quality	12 bacteria samples, 3 samples exceeding the 400 MPN, Geomean of 243 exceed 200 MPN.
Spatial representation	1 site.
Temporal representation	All seasons during 1998-1999.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body information including the effects season, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Calleguas Creek Reach 1 (was Mugu Lagoon on the 1998 303(d) + Unknown

Water Body	Calleguas Creek Reach 1 (was Mugu Lagoon on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Unknown Pollutant/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Sediment toxicity is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Benthic Community Index is applicable to Aquatic Life.
Water Body-specific Information	
Data used to assess water quality	While there are benthic community impacts, these impacts are conditions of a water body. A number of pollutants are listed for Calleguas Creek Reach 1. In this specific case, these pollutants (e.g., copper, nickel, and zinc) likely cause or contribute to the benthic community impact conditions observed.
Spatial representation	No data presented.
Temporal representation	No data presented.
Data type	No data presented.
Use of standard method	No data presented.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff an aerial deposition from urban and agricultural areas.
Alternative Enforceable Program	
RWQCB Recommendation	List due to benthic community degradation.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because benthic community index information was not presented as well as contributing pollutant(s) were not identified. Benthic Community is a condition of a water body and not pollutants.

Region 4: Calleguas Creek Reach 1 (was Mugu Lagoon)

Dieldrin

Water Body	Calleguas Creek Reach 1 (was Mugu Lagoon)
Stressor/Media/Beneficial Use	Dieldrin/Tissue/Aquatic life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	MTRLs are not linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	MTRLs are not applicable to Aquatic Life.
Water Body-specific Information	Data is 8 years old, data measured in the waterbody, species present, one time sample event.
Data used to assess water quality	1 tissue sample, 1 sample exceeding.
Spatial representation	Sample was collected spatially.
Temporal representation	One time sample event.
Data type	Numerical data.
Use of standard method	BPTCP methods.
Potential Source(s) of Pollutant	Historical use of pesticides, stormwater runoff, and aerial deposition from urban and agricultural area.
Alternative Enforceable Program	
RWQCB Recommendation	Exclude from listing. Listing was based on obsolete data.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because it cannot be determined if data exceeds standard.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be inadequate. 2. Beneficial uses have been established and apply to the water body. 3. The evaluation guideline used to interpret narrative water quality standards is inadequate. MTRLs are not associated with protection of Aquatic Life beneficial uses. 4. Data are numerical. 5. Standard methods were used. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including the age of the data were considered. <p>An inadequate amount of water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is extremely low.</p>

Region 4: Calleguas Creek Reach 1 (was Mugu Lagoon) Dacthal

Water Body	Calleguas Creek Reach 1 (was Mugu Lagoon)
Stressor/Media/Beneficial Use	Dacthal/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Guideline for Dacthal in tissue is not available; therefore, there is not a linkage to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Guidelines for Dacthal in tissue are not available.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Historical use of pesticides, stormwater runoff, and aerial deposition from urban and agricultural area.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because there are no approved guidelines for Dacthal in tissue.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because there are no guidelines for Dacthal and tissue samples are not linked to aquatic life protection.

Region 4: Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was pa + Fecal Coliform

Water Body	Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo Creek Reach 2 and 3, and lower Conejo Creek/Arroyo Conejo North Fork on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Basin Plan WQO numerical, exceedances in 200-400 MPN/ml are applicable to REC-1.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	24 bacterial samples, 11 samples exceeding at 400 MPN, Geomean 431 exceed 200 MPN.
Spatial representation	2 sites.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body information including the effects season, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was pa + Nitrite as Nitrogen

Water Body	Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo Creek Reach 2 and 3, and lower Conejo Creek/Arroyo Conejo North Fork on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Nitrite as Nitrogen/Water/Groundwater Recharge
Data quality assessment. Extent to which data quality requirements met.	NPDES Program and Calleguas Creek Ambient Water Quality Monitoring Program
Linkage between measurement endpoint and beneficial use or standard	Nitrite as Nitrogen WQO is linked to Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	WQO exceedances of 1.0 ppm are applicable to Groundwater Recharge.
Water Body-specific Information	Data 2-5 years old, data measured at site, measured during all seasons.
Data used to assess water quality	42 water samples, 5 samples exceeding.
Spatial representation	1 site.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	NPDES Program and Calleguas Creek Ambient Water Quality Monitoring Program methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to a greater than 10% exceedance of nitrite as nitrogen objective as stated in Basin Plan.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other site-specific information including the effects of season, and age of the data were considered. <p>An adequate amount of the water quality measurements exceeded the water quality standard. Staff confidence that standards were exceeded is low.</p>

Region 4: Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was pa + Organic Enrichment-Low Dissolved Oxygen

Water Body	Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo Creek Reach 2 and 3, and lower Conejo Creek/Arroyo Conejo North Fork on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Organic Enrichment-Low Dissolved Oxygen/Water/Aquatic Life (warm water habitat)
Data quality assessment. Extent to which data quality requirements met.	NPDES Program and Calleguas Creek Ambient Water Quality Monitoring Program
Linkage between measurement endpoint and beneficial use or standard	Organic Enrichment-Low Dissolved Oxygen WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO for Dissolved Oxygen between 5-7 ppm is applicable to Aquatic Life.
Water Body-specific Information	Data 2-5 years old, data measured at site, measured during all seasons.
Data used to assess water quality	81 water samples, 3 samples exceeding.
Spatial representation	Unknown.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	NPDES Program and Calleguas Creek Ambient Water Quality Monitoring Program methods.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the Basin Plan objective for dissolved oxygen (5- 7 ppm) was met.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, storm events, and age of the data were considered.

Region 4: Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was pa + Organic Enrichment-Low Dissolved Oxygen

Most of the water quality measurements did not exceed the water quality standard. The staff confidence that standards were not exceeded is high.

Region 4: Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was pa + Chloride

Water Body	Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo Creek Reach 2 and 3, and lower Conejo Creek/Arroyo Conejo North Fork on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Chloride/Water/Agriculture
Data quality assessment. Extent to which data quality requirements met.	NPDES report and Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Chloride WQO is linked to Agriculture.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to Agriculture.
Water Body-specific Information	Data 2-5 years old, data measured at site, measured during all seasons.
Data used to assess water quality	97 water samples, 16 samples exceeding.
Spatial representation	1 site.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	NPDES and Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body information including the effects season, storm events, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 11 (Arroyo Santa Rosa-was part of Con + Organic Enrichment-Low Dissolved Oxygen)

Water Body	Calleguas Creek Reach 11 (Arroyo Santa Rosa-was part of Conejo Creek Reach 3 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Organic Enrichment-Low Dissolved Oxygen/Water/Aquatic Life (warm water habitat)
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Organic Enrichment-Low Dissolved Oxygen WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data 2-5 years old, data measured at site, measured during all seasons.
Data used to assess water quality	41 water samples, 0 samples exceeding.
Spatial representation	1 site.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the Basin Plan objective for dissolved oxygen was met.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, and age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: Calleguas Creek Reach 11 (Arroyo Santa Rosa-was part of Con + Fecal Coliform)

Water Body	Calleguas Creek Reach 11 (Arroyo Santa Rosa-was part of Conejo Creek Reach 3 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO exceeding 200-400 MPN/ml is applicable.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	12 water samples, Geomean of 393 exceeds 200 MPN; 6 samples exceeding the 400 MPN.
Spatial representation	1 site.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.7. Standard methods were used.8. Other water body information including the effects season, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 12 (was Conejo Creek/Arroyo Conejo No + Organic Enrichment-Low Dissolved Oxygen)

Water Body	Calleguas Creek Reach 12 (was Conejo Creek/Arroyo Conejo North Fork on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Organic Enrichment-Low Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	NPDES monitoring.
Linkage between measurement endpoint and beneficial use or standard	Organic Enrichment-Low Dissolved Oxygen WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to Aquatic Life.
Water Body-specific Information	Date = 2 - 5 years old, collected at site(s) during all seasons for 3 years.
Data used to assess water quality	83 water samples, 5 (6%) samples exceeding.
Spatial representation	One site.
Temporal representation	Collected from 7/1997 - 12/2000, throughout the 3 years
Data type	Numerical data.
Use of standard method	NPDES and TMDL methods.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because there was not enough samples exceeding the Dissolved Oxygen WQO.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements did not exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: Calleguas Creek Reach 13 - Conejo Creek (South Fork)-was Co + Chloride

Water Body	Calleguas Creek Reach 13 - Conejo Creek (South Fork)-was Conejo Creek Reach 4 and part of Reach 3 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Chloride/Water/ Agriculture
Data quality assessment. Extent to which data quality requirements met.	NPDES Reports.
Linkage between measurement endpoint and beneficial use or standard	Chloride WQO is linked to Agriculture.
Utility of measure for judging if standards or uses are not attained	WQO exceedances of 150 mg/L is applicable.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	19 water samples, 17 samples exceeding.
Spatial representation	2 sites.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	NPDES methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances in the WQO for Chloride.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body information including the effects season, and age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 13 - Conejo Creek (South Fork)-was Co + Organic Enrichment-Low Dissolved Oxygen

Water Body	Calleguas Creek Reach 13 - Conejo Creek (South Fork)-was Conejo Creek Reach 4 and part of Reach 3 on the 1998 303(d) list
Stressor/Media/Beneficial Use	Organic Enrichment-Low Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	NPDES.
Linkage between measurement endpoint and beneficial use or standard	Organic Enrichment-Low Dissolved Oxygen WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data = 2 - 5 years old, collected at site, sampled all seasons.
Data used to assess water quality	83 water samples, 5 samples exceeding.
Spatial representation	Unknown.
Temporal representation	Samples were collected 7/1997 -1 2/2000.
Data type	Numerical data.
Use of standard method	NPDES and TMDL methods.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because there are not enough samples exceeding the water-quality objective for dissolved oxygen.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements did not exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: Calleguas Creek Reach 2 (area affected is at the mouth)

Fecal Coliform

Water Body	Calleguas Creek Reach 2 (area affected is at the mouth)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Numerical WQO is applicable to REC-1.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	34 bacterial samples, Geomean of 934 exceeds 200 MPN standard, 24 samples exceeding at 400 MPN.
Spatial representation	3 sites.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body information including the effects season, storm events, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 2 (estuary to Potrero Road-was Calleg + Dissolved Copper

Water Body	Calleguas Creek Reach 2 (estuary to Potrero Road-was Calleguas Creek Reaches 1 and 2 on 1998 303(d) list)
Stressor/Media/Beneficial Use	Dissolved Copper/Water Column/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study.
Linkage between measurement endpoint and beneficial use or standard	Dissolved copper CTR (saltwater) criterion is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Dissolved Copper CTRs acute and chronic criteria is applicable to Aquatic Life.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	11 water samples, 7 samples exceeding for 4 days and 3 sample exceeding for 1 hour salt water standard.
Spatial representation	3 sites.
Temporal representation	Summer/fall/winter of 1998 and 1999.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded for acute and chronic salt water CTR criteria and the pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 2 (estuary to Potrero Road-was Calleg + DDT

Water Body	Calleguas Creek Reach 2 (estuary to Potrero Road-was Calleguas Creek Reaches 1 and 2 on 1998 303(d) list)
Stressor/Media/Beneficial Use	DDT/Water Column/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	DDT chronic water quality criterion in the CTR is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Chronic water quality criterion for DDT in the water column is applicable to Aquatic Life.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	11 water samples, 7 samples exceeding.
Spatial representation	3 sites.
Temporal representation	Summer/fall/winter/spring in 1998 and 1999.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Calleguas Creek Reach 2 (estuary to Potrero Road-was Calleg + Chem A

Water Body	Calleguas Creek Reach 2 (estuary to Potrero Road-was Calleguas Creek Reaches 1 and 2 on 1998 303(d) list)
Stressor/Media/Beneficial Use	Chem A/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	Chemical Tissue concentration based on NAS guidelines are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	NAS guidelines are applicable to Aquatic Life.
Water Body-specific Information	Data for Chem Group A was not presented.
Data used to assess water quality	Data for Chem Group A was not presented.
Spatial representation	Data for Chem Group A was not presented.
Temporal representation	Unknown.
Data type	Numerical data.
Use of standard method	Data for Chem Group A was not presented.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	Originally recommended for delisting. Reevaluation resulted in a recommendation to maintain on the list because NAS guidelines are still useful for aquatic life protection. This guideline should continue to be used until an alternative value is available.
SWRCB Staff Recommendation	After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should not be removed from the section 303(d) list because the NAS guidelines are not outdated and remain a valid assessment tools.

Region 4: Calleguas Creek Reach 2 (estuary to Potrero Road-was Calleg + Toxicity

Water Body	Calleguas Creek Reach 2 (estuary to Potrero Road-was Calleguas Creek Reaches 1 and 2 on 1998 303(d) list)
Stressor/Media/Beneficial Use	Toxicity/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Water Column Toxicity is linked to Aquatic Life. There was no toxicity recorded and a stressor was not identified.
Utility of measure for judging if standards or uses are not attained	Water Column Toxicity is applicable to Aquatic Life. There was no toxicity recorded and a stressor was not identified.
Water Body-specific Information	Data 3-4 years old, data measured at site, during summer of 1998 and 1999.
Data used to assess water quality	6 water samples, 0 mortality for toxicity test and 0 reproductive effects and/or growth inhibition.
Spatial representation	One site.
Temporal representation	Summer 1998 and 1999.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because results from testing one site downstream of Camrosa WWTP for chronic water column toxicity using fathead minnow and Ceriodaphnia exhibited no toxicity.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 7. Standard toxicity methods were used. 8. Other water body information including season and the age of the data were considered. <p>None of the water quality measurements exceeded the narrative objective. The staff confidence that the water quality objective were not exceeded is high.</p>

Region 4: Calleguas Creek Reach 3 (Potrero Road upstream to confluence + Chloride)

Water Body	Calleguas Creek Reach 3 (Potrero Road upstream to confluence with Conejo Creek on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Chloride/Water/Ground Water Recharge and Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Region 4: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: M + Nitrate as Nitrate)

Water Body	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Nitrate as Nitrate/Water/Groundwater Recharge
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Nitrate as Nitrate WQO is linked to Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	WQO is applicable Groundwater Recharge.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	43 water samples, 38 samples exceeding.
Spatial representation	3 sites.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body information including the effects season and age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: M + Dacthal)

Water Body	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Dacthal/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	Dacthal measurements in sediment are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Approved Dacthal sediment guidelines do not exist.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	No data presented.
Data type	No data presented.
Use of standard method	N/A
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because there are no valid approved guidelines for Dacthal.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because approved valid guideline for Dacthal in sediment do not exist.

Region 4: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: M + Chloride)

Water Body	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Chloride/Water/Agriculture and Groundwater Recharge.
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	There are no water body specific objective applicable for this constituent.
Utility of measure for judging if standards or uses are not attained	There are no water body specific objective applicable for this constituent.
Water Body-specific Information	Data 3-5 years old, data measured at site, measured during all seasons.
Data used to assess water quality	15 water samples, however there is no water body specific objective applicable for this constituent to assess exceedances.
Spatial representation	3 sites.
Temporal representation	Summer/fall/winter/spring of 1997-1999.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	Calleguas Creek Chloride TMDL 2001.
RWQCB Recommendation	Do not list. There is no water body-specific objective available for this constituent.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because there is not a water body specific objective for chloride in the Basin Plan.

Region 4: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: M + Chem A

Water Body	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Chem A/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	Chem A NAS guidelines in tissue are Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Chem A NAS guidelines are applicable to Aquatic Life.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	Originally recommended for delisting because listing was based on NAS outdated guidelines. Reevaluation resulted in a recommendation to maintain on list because Chem A group are not outdated and are still valid guidelines set by NAS to protect aquatic life.
SWRCB Staff Recommendation	After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should not be removed from the section 303(d) list because the NAS guidelines are not outdated and remain a valid assessment tools. This guideline should continue to be used until an alternative value is available.

Region 4: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: M + TDS

Water Body	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on the 1998 303(d) list)
Stressor/Media/Beneficial Use	TDS/Water/There is no water body specific WQO.
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	There is no water body specific objective available for this constituent.
Utility of measure for judging if standards or uses are not attained	There is no water body specific objective available for this constituent.
Water Body-specific Information	Data 3-5 years old, data measured at site, measured during all seasons.
Data used to assess water quality	15 water sample, however there is no water body specific objective available for this constituent to assess exceedances.
Spatial representation	3 sites.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list. There is no water body-specific objective available for this constituent.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because there is not a water body specific objective for TDS in the Basin Plan.

Region 4: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: M + Sulfate)

Water Body	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Sulfate/Water/There is no water body specific WQO.
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	There is no water body specific objective available for this constituent.
Utility of measure for judging if standards or uses are not attained	There is no water body specific objective available for this constituent.
Water Body-specific Information	Data 3-5 years old, data measured at site, measured during all seasons.
Data used to assess water quality	15 water samples, however there is no water body specific quality objective for this constituent to assess exceedances.
Spatial representation	3 sites.
Temporal representation	Samples were collected from summer 98 through summer 99.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list. There is no water body-specific objective available for this constituent.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because there is not a water body specific objective for chloride in the Basin Plan.

Region 4: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: M + Fecal Coliform)

Water Body	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Numerical WQO is applicable to REC-1.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	12 bacteria samples, 6 samples exceeding 400 MPN.
Spatial representation	1 site.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Point and nonpoint.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: M + Boron)

Water Body	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Boron/Water/There is no water body specific WQO.
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	There is no water body specific objective applicable for this constituent.
Utility of measure for judging if standards or uses are not attained	There is no water body specific objective applicable for this constituent.
Water Body-specific Information	Data 3-4 years old, data measured at site measured during all seasons.
Data used to assess water quality	13 water samples, however there is no water body specific objective applicable for this constituent to assess for exceedances.
Spatial representation	2 sites.
Temporal representation	Summer/fall/winter/spring of 98-99.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list. There is no water body specific objective available for this constituent.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because there is not a water body specific objective for Boron in the Basin Plan.

Region 4: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mu + Dacthal)

Water Body	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue)
Stressor/Media/Beneficial Use	Dacthal/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	Data 5-8 years old, sample taken at site, species present, sample taken from summer during 2 years.
Data used to assess water quality	2 tissue samples, 2 samples exceeding.
Spatial representation	Samples were collected spatially.
Temporal representation	Summer 1994 and 1997.
Data type	Numerical data.
Use of standard method	TSMP Data
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are not a valid assessment guideline.
SWRCB Staff Recommendation	This constituent cannot be removed from the 1998 section 303(d) list because dacthal was not listed for tissue. The 1998 listing was for sediment concentrations of dacthal.

Region 4: Calleguas Creek Reach 6 (was Arroyo Las Posas Reaches 1 and + Nitrate as Nitrate (NO3))

Water Body	Calleguas Creek Reach 6 (was Arroyo Las Posas Reaches 1 and 2 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Nitrate as Nitrate (NO3)/Water/Groundwater Recharge
Data quality assessment. Extent to which data quality requirements met.	NPDES Reports
Linkage between measurement endpoint and beneficial use or standard	Nitrate as Nitrate (NO3) WQO is linked to Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to Groundwater Recharge.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	12 water samples, 8 sample exceeding.
Spatial representation	1 site.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	NPDES methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 6 (was Arroyo Las Posas Reaches 1 and + Fecal Coliform

Water Body	Calleguas Creek Reach 6 (was Arroyo Las Posas Reaches 1 and 2 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1.
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQOs is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQOs are applicable to REC-1.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	12 bacterial samples, 4 samples exceeding, Geomean of 557 exceed 200 MPN and 4 samples exceed 400 MPN.
Spatial representation	1 site.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body information including the effects season, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 7 (was Arroyo Simi Reach 1 and 2 on t + Selenium

Water Body	Calleguas Creek Reach 7 (was Arroyo Simi Reach 1 and 2 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Selenium/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are no longer a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Calleguas Creek Reach 7 (was Arroyo Simi Reach 1 and 2 on t + Organophosphates

Water Body	Calleguas Creek Reach 7 (was Arroyo Simi Reach 1 and 2 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Organophosphates/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Toxicity, chemistry and TIE/Diazinon and Ammonia are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Based on a toxicity, chemistry and TIE which are applicable to Aquatic Life.
Water Body-specific Information	Age of data 4 years, collected at site.
Data used to assess water quality	22 water sample, 1998-99 toxicity was documented. Subsequent chemistry and TIEs identified ammonia, chlorpyrifos and diazinon.
Spatial representation	Site 1 (8 samples, 2 species) upstream from POTW, Site 3 (8 samples, 2 species) downstream from POTW at Hwy 118, Site 2 (6 samples, 2 species) immediately downstream from POTW.
Temporal representation	Monthly sampling from 8/1998 to 6/1999.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Agriculture, POTWs, Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List because water column toxicity which affects aquatic life beneficial use.
SWRCB Staff Recommendation	After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and the pollutants identified in the TIE contribute to or cause the problem.

Region 4: Calleguas Creek Reach 7 (was Arroyo Simi Reach 1 and 2 on t + Nickel

Water Body	Calleguas Creek Reach 7 (was Arroyo Simi Reach 1 and 2 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Nickel/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are no longer a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on + Zinc

Water Body	Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Zinc/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	Data 4-9 years old, Environmental data measured at site/waterbody, species/indicators present.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are no longer a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on + Chromium

Water Body	Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Chromium/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are no longer a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on + Silver

Water Body	Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Silver/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	Data was not presented.
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs is no longer a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on + Fecal Coliform

Water Body	Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	24 bacteria samples, 17 samples exceeding the 400 MPN standard, Geomean of 909 exceed 200 MPN.
Spatial representation	2 sites.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 9A (was lower part of Conejo Creek R + Toxicity)

Water Body	Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Toxicity/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Water column toxicity is linked to aquatic life however the stressor is not considered a pollutant.
Utility of measure for judging if standards or uses are not attained	Water Column toxicity is applicable to aquatic life but stressor is not a pollutant.
Water Body-specific Information	Data 2-5 years old, data measured at site, during all seasons from 1997 to 2000.
Data used to assess water quality	32 water samples, number of samples exceeding the standard is low.
Spatial representation	Three sampling sites, two of which overlapped on three sample dates.
Temporal representation	All seasons from August 1997 to August 2000.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	POTWs and Agricultural Use.
Alternative Enforceable Program	
RWQCB Recommendation	Delist.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded and the pollutant(s) potentially causing the toxicity were not identified.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses apply to the water body.4. Water quality standard used is applicable.5. The evaluation guideline used to interpret narrative water quality standards is adequate.6. Data are numerical.7. Standard methods were used.8. Other water body- or site-specific information including the effects of natural sources, season, and age of the data were considered. <p>Most of toxicity tests did not exceed the water quality standard. Staff confidence that standards were not exceeded is moderate.</p>

Region 4: Calleguas Creek Reach 9A (was lower part of Conejo Creek Re + Organic Enrichment-Low Dissolved Oxygen)

Water Body	Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Organic Enrichment-Low Dissolved Oxygen/Water/Aquatic Life.
Data quality assessment. Extent to which data quality requirements met.	NPDES Monitoring
Linkage between measurement endpoint and beneficial use or standard	Organic Enrichment-Low Dissolved Oxygen WQO are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data 1-5 years old, data measured at site, measured during all seasons.
Data used to assess water quality	111 water samples, 6 sample exceeding.
Spatial representation	2 sites.
Temporal representation	Summer/fall/winter/spring (1997-2000).
Data type	Numerical data.
Use of standard method	NPDES Monitoring metadata was used.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the WQO for dissolved oxygen was met.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, and age of the data were considered. <p>Most of the water quality measurements did not exceed the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: Calleguas Creek Reach 9A (was lower part of Conejo Creek Re + Nitrite as Nitrogen

Water Body	Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Nitrite as Nitrogen/Water/Groundwater Recharge
Data quality assessment. Extent to which data quality requirements met.	NPDES Report.
Linkage between measurement endpoint and beneficial use or standard	Nitrite as Nitrogen WQO is linked to Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	WQOs are applicable to Groundwater Recharge.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	110 water samples, 18 samples exceeding.
Spatial representation	1 site only (Conejo Creek).
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	Currently in a TMDL.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body information including the effects season, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 9A (was lower part of Conejo Creek Re + Nitrate as Nitrate (NO3))

Water Body	Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Nitrate as Nitrate (NO3)/Water/Groundwater Recharge
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Nitrate as Nitrate (NO3) WQOs are linked to Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	WQOs are applicable to Groundwater Recharge.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	12 water samples, 6 samples exceeding.
Spatial representation	1 site only (Conejo Creek).
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	Currently in a TMDL.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 9A (was lower part of Conejo Creek Re + Nitrate as Nitrogen

Water Body	Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Nitrate as Nitrogen/Water/Groundwater Recharge
Data quality assessment. Extent to which data quality requirements met.	NPDES Reports
Linkage between measurement endpoint and beneficial use or standard	Nitrate as Nitrogen WQO is linked to Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	WQOs are applicable to Groundwater Recharge.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	111 water samples, 15 sample exceeding.
Spatial representation	1 site only (Conejo Creek).
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body information including the effects season, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 9A (was lower part of Conejo Creek Re + Fecal Coliform)

Water Body	Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	12 bacteria samples, 5 samples exceeding sample exceed 400 MPN and the Geomean of 206 exceeds 200.
Spatial representation	1 site (small Reach).
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p><i>This conclusion is based on the staff findings that:</i></p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 9A - Conejo Creek (South Fork)-was Co + Dieldrin

Water Body	Calleguas Creek Reach 9A - Conejo Creek (South Fork)-was Conejo Creek Reach 4 and part of Reach 3 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Dieldrin/Tissue/COMM
Data quality assessment. Extent to which data quality requirements met.	TSMP-QAPP
Linkage between measurement endpoint and beneficial use or standard	Dieldrin MTRs are linked to COMM.
Utility of measure for judging if standards or uses are not attained	MTRs are applicable to COMM.
Water Body-specific Information	Data 4 years old, measured at site, species present, one-time sampling.
Data used to assess water quality	2 tissue samples, 2 samples exceeding.
Spatial representation	Sample was collected spatially.
Temporal representation	One-time sample.
Data type	Numerical data.
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances of MTRs.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and insufficient temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. The evaluation guideline used to interpret narrative water quality standards is adequate.6. Data are numerical.7. Standard methods were used.8. Water body information including the age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Calleguas Creek Reach 9A - Conejo Creek (South Fork)-was Co + PCBs

Water Body	Calleguas Creek Reach 9A - Conejo Creek (South Fork)-was Conejo Creek Reach 4 and part of Reach 3 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	PCBs/Tissue/COMM
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	PCB MTRLs are linked to COMM.
Utility of measure for judging if standards or uses are not attained	MTRLs are applicable to COMM.
Water Body-specific Information	Data 4 years old, measured at site, one-time sampling.
Data used to assess water quality	2 composite tissue samples, 2 samples exceeding.
Spatial representation	Sample were collected spatially.
Temporal representation	One-time sample.
Data type	Numerical data.
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances of MTRLs.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and insufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Water body information including the age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Calleguas Creek Reach 9A - Conejo Creek (South Fork)-was Co + Chlordane

Water Body	Calleguas Creek Reach 9A - Conejo Creek (South Fork)-was Conejo Creek Reach 4 and part of Reach 3 on the 1998 303(d) list
Stressor/Media/Beneficial Use	Chlordane/Tissue/COMM.
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	Chlordane MTRs are linked to COMM
Utility of measure for judging if standards or uses are not attained	MTRs are applicable to COMM.
Water Body-specific Information	Data 4 years old, measured at site, species present, one-time sampling.
Data used to assess water quality	2 tissue samples, 2 samples exceeding.
Spatial representation	Sample was collected spatially.
Temporal representation	One-time sample.
Data type	Numerical data.
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances of MTRs.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and insufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Water body information including the age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Calleguas Creek Reach 9A - Conejo Creek (South Fork)-was Co + Hexachlorocyclohexane

Water Body	Calleguas Creek Reach 9A - Conejo Creek (South Fork)-was Conejo Creek Reach 4 and part of Reach 3 on the 1998 303(d) list
Stressor/Media/Beneficial Use	Hexachlorocyclohexane/Tissue/COMM
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	Hexachlorocyclohexane MTRLs are linked to COMM.
Utility of measure for judging if standards or uses are not attained	MTRLs are applicable to COMM.
Water Body-specific Information	Data 4 years old, measured at site, species present, one-time sampling.
Data used to assess water quality	2 tissue samples, 2 samples exceeding.
Spatial representation	Sample was collected spatially.
Temporal representation	One-time sample.
Data type	Numerical data.
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances of MTRLs.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p><i>This conclusion is based on the staff findings that:</i></p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and insufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Water body information including the age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Calleguas Creek Reach 9B (was part of Conejo Creek Reaches + Organic Enrichment-Low Dissolved Oxygen)

Water Body	Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2)
Stressor/Media/Beneficial Use	Organic Enrichment-Low Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	NPDES Monitoring QA/QC
Linkage between measurement endpoint and beneficial use or standard	Organic Enrichment-Low Dissolved Oxygen WQO are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data 2 to 5 years old.
Data used to assess water quality	83 samples, 5 samples (6%) less than 5 mg/L.
Spatial representation	One site.
Temporal representation	Sampling all seasons from 7/1997 to 11/2/2000.
Data type	TMDL monitoring methods.
Use of standard method	NPDES methods.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of natural sources, season, storm events and age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. Staff confidence that standards are not exceeded high.</p>

Region 4: Calleguas Creek Reach 9B (was part of Conejo Creek Reaches + Unnatural Foam and Scum)

Water Body	Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2)
Stressor/Media/Beneficial Use	Unnatural Foam and Scum/Water/REC-1, REC-2 and Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study and DFG
Linkage between measurement endpoint and beneficial use or standard	Unnatural Foam and Scum is linked to REC-2 , however listing is based on photograph documentation.
Utility of measure for judging if standards or uses are not attained	Use of measure is limited (based on photographs).
Water Body-specific Information	Narrative information including photographs. Water samples were not collected.
Data used to assess water quality	One photograph.
Spatial representation	One photograph.
Temporal representation	21-Apr-01.
Data type	Non numerical information (One Photograph).
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Agriculture and Natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to non-attainment of the narrative objective for floating and settleable materials objective in the Basin Plan.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if a pollutant contributes or causes any standards exceedance. The cause of the foam and scum may be nutrient enrichment but such pollutants have not been identified.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data exhibited insufficient spatial and temporal coverage. 2. The evaluation guideline used to interpret narrative water quality standards is inadequate. 3. Data are not numerical, based on one photograph. 4. Non-standard methods were used. 5. No water quality measurements were submitted. <p>Staff confidence that standards were exceeded is extremely low.</p>

Region 4: Calleguas Creek Watershed (Reaches 1-8, 11)

Sedimentation

Water Body	Calleguas Creek Watershed (Reaches 1-8, 11)
Stressor/Media/Beneficial Use	Sedimentation/Sediment/Aquatic Life.
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study/DFG Bioassessment.
Linkage between measurement endpoint and beneficial use or standard	Macroinvertebrate and Bioassessment are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	DFG guidelines for macroinvertebrate and bioassessment are applicable to Aquatic Life.
Water Body-specific Information	Data 3-8 years old, data measured at site, species present.
Data used to assess water quality	Bioassessment.
Spatial representation	Some sites listed.
Temporal representation	Unknown.
Data type	Non-numerical data.
Use of standard method	DFG methods.
Potential Source(s) of Pollutant	Agriculture and natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to excessive sedimentation.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because sedimentation contributes to or causes the problem. Listing was based on a 1998 DFG bioassessment report.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The information provided in the report is considered adequate. 2. Beneficial uses apply to the water body. 3. The bioassessment evaluation guideline used to interpret narrative water quality standards is adequate. 4. Data are not numerical. 5. Standard bioassessment methods were used. 6. Other site-specific information including the effects of natural sources, season, storm events, and age of the data were considered. <p>An adequate amount of biological measurements exceeded the bioassessment guidelines. Staff confidence that standards were exceeded is moderate.</p>

Region 4: Canada Larga

Fecal Coliform

Water Body	Canada Larga
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Unknown.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data is 1-3 year old, data measured in the waterbody, samples collected different in seasons and years.
Data used to assess water quality	Fecal Coliform (9 bacteria samples, 1 sample exceeding), E. coli (10 bacteria samples, 3 samples exceeding), Combined (19 bacteria samples, 4 samples exceeding).
Spatial representation	Unknown.
Temporal representation	Different seasons and years.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Horse stables, land use, cattle, wildlife.
Alternative Enforceable Program	
RWQCB Recommendation	List due to greater than 10% exceedance of the fecal coliform objective.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Canada Larga

Dissolved Oxygen

Water Body	Canada Larga
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/Aquatic Life (warm-cold water and wildlife habitat, spawning, reproduction and migration)
Data quality assessment. Extent to which data quality requirements met.	Ojai Valley River Volunteer Monitoring Program.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO exceedance below 5 mg/L for Dissolved Oxygen is applicable to Aquatic Life.
Water Body-specific Information	Data is 1-3 year old, data measured in the waterbody, samples collected different in seasons and years.
Data used to assess water quality	21 water samples, 5 samples exceeding.
Spatial representation	2 stations.
Temporal representation	Collected during all seasons.
Data type	Numerical data.
Use of standard method	Ojai Valley River Volunteer Monitoring Program methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to greater than 10% exceedance of the instantaneous dissolved oxygen objective.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Castlerock Beach

Bacterial Indicators

Water Body	Castlerock Beach
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards which is applicable to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	17 samples, 13 samples exceeding.
Spatial representation	1 station: ID99999. This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Channel Islands Harbor - Beach Park at the end of Rocks

Bacterial Indicators

Water Body	Channel Islands Harbor - Beach Park at the end of Rocks
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards which are applicable to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	33 samples, 2 samples exceeding.
Spatial representation	1 station: VC(37000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: Channel Islands Harbor-Beach Park at S. end of Victoria Ave + Bacterial Indicators

Water Body	Channel Islands Harbor-Beach Park at S. end of Victoria Avenue
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	99 samples, 54 samples exceeding.
Spatial representation	1 station: VC(37000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Cold Creek Algae

Water Body	Cold Creek
Stressor/Media/Beneficial Use	Algae/Water/REC-1 and REC-2, Aquatic Life (spawning, rare and endangered species, warm and cold, wildlife freshwater habitat)
Data quality assessment. Extent to which data quality requirements met.	QA/QC unknown data generated by Heal the Bay monitoring program.
Linkage between measurement endpoint and beneficial use or standard	Excessive Algae growth is linked to REC-1 and REC-2, however Aquatic Life linkage is not clear.
Utility of measure for judging if standards or uses are not attained	New Zealand Periphyton Guideline (Biggs, 2000) applicability uncertain.
Water Body-specific Information	Data 1-4 years old, data measured at site, species present, measured during fall and spring in 2 years.
Data used to assess water quality	43 samples, 8 samples exceed the 30% algae cover based on Biggs, New Zealand Periphyton Guideline (2000). No pollutant was identified.
Spatial representation	2 sites.
Temporal representation	Fall and spring in two years.
Data type	Numerical data.
Use of standard method	Heal the Bay (Citizens Monitoring) methods.
Potential Source(s) of Pollutant	Nonpoint sources from septic tanks and livestock.
Alternative Enforceable Program	
RWQCB Recommendation	List due to observations of excessive algal growth-greater than 30% coverage, based on Biggs (2000).
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List. The Basin Plan Water Quality Objective for floating material may be exceeded but habitat features or the biostimulatory substance contributing or causing such algae growth has not been identified.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality for REC-2 impact determinations. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Non-standard methods were used. 8. Other water body- or site-specific information including the age of the data were considered.

Region 4: Cold Creek

Algae

An adequate number of algae coverage measurements exceed the REC-2 Basin Plan Water Quality Objective for Floating Materials. The staff confidence that standards were exceeded is moderate. However, the pollutant causing the algae growth has not been identified.

Region 4: Colorado Lagoon

Lead

Water Body	Colorado Lagoon
Stressor/Media/Beneficial Use	Lead/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Not applicable
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	Unknown.
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because listing was based on EDLs which not a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret water quality standards.

Region 4: Compton Creek Trash

Water Body	Compton Creek
Stressor/Media/Beneficial Use	Trash/Water/REC-1, REC-2 , and Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Quality assurance information was not provided.
Linkage between measurement endpoint and beneficial use or standard	Trash is linked to REC-1, REC-2 and Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Photographs can indicate gross impacts on beneficial uses and whether standards have been exceeded. Measurements of the amount of trash collected can provide a relative measure of the potential for nuisance.
Water Body-specific Information	Photographs of the condition on the Creek were provided. The photographs were taken at the Creek on 9/21/2002, three weeks after the creek channel was cleaned out by heavy equipment for flood control purposes. Data on the collection of trash and debris were also submitted.
Data used to assess water quality	1650 pounds of trash and debris were collected from volunteers over a 4 hour period in 2002. After the cleanup of the small section of the Creek, trash was still present that could have affected habitat and impeded flows.
Spatial representation	Along 75 yards of the Creek.
Temporal representation	One 4 hour period in 2002.
Data type	Numerical and Non-numerical.
Use of standard method	Unknown
Potential Source(s) of Pollutant	Probably storm water discharge.
Alternative Enforceable Program	
RWQCB Recommendation	No recommendation was made by the RWQCB.
SWRCB Staff Recommendation	<p>In the review of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine whether applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of unknown quality. 2. The data exhibited insufficient spatial and temporal coverage. <p>An inadequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is low.</p>

Region 4: Coyote Creek Ammonia

Water Body	Coyote Creek
Stressor/Media/Beneficial Use	Ammonia/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	There was no new data assessed for this water body-pollution combination.
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	No new data were submitted which indicates that water quality standards are met.
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Point sources
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this Reach.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. It is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants is much lower than downstream concentrations (up to an order of magnitude difference).</p>
RWQCB Recommendation	None.

Region 4: Coyote Creek Ammonia

SWRCB Staff Recommendation

After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: Coyote Creek Dissolved Copper

Water Body	Coyote Creek
Stressor/Media/Beneficial Use	Dissolved Copper/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Stormwater Monitoring Program
Linkage between measurement endpoint and beneficial use or standard	Dissolved Copper CTR criterion is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR criterion is applicable to Aquatic Life.
Water Body-specific Information	Data 2-5 years old, data measured in waterbody, sample taken different seasons and years.
Data used to assess water quality	26 water samples, 16 samples exceeding.
Spatial representation	1 site.
Temporal representation	Fall, winter, spring (1997-2000).
Data type	Numerical data.
Use of standard method	Stormwater Monitoring Program methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to greater than 10% exceedance of the WQO and CTR.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical, not numerical, both numerical . 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Coyote Creek Toxicity

Water Body	Coyote Creek
Stressor/Media/Beneficial Use	Toxicity/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data submitted in the 2000 NPDES Annual Monitoring Reports of the Long Beach and Valencia Water Reclamation Plants.
Linkage between measurement endpoint and beneficial use or standard	Toxicity is linked to Aquatic Life, however the stressor was not confirmed.
Utility of measure for judging if standards or uses are not attained	Toxicity is applicable to Aquatic Life, however the stressor was not confirmed.
Water Body-specific Information	Receiving water stations downstream of the Long Beach WRP on Coyote Creek in 1999-2000.
Data used to assess water quality	Chronic toxicity has been detected at receiving water stations downstream of the Long Beach WRP on Coyote Creek in 1999-2000 and downstream of the Valencia WRP on the Santa Clara River during 2000. Toxicity identification evaluations have been performed using zeolite filtration to control ammonia toxicity. The test results indicated ammonia was likely the principal cause of toxicity.
Spatial representation	Receiving water stations downstream of the Long Beach WRP on Coyote Creek and downstream of the Valencia WRP on the Santa Clara River.
Temporal representation	Toxicity identification evaluation completed: 1999-2000.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Point sources.
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this Reach.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs.</p>
RWQCB Recommendation	None.

Region 4: Coyote Creek Toxicity

SWRCB Staff Recommendation

After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: Coyote Creek

Dissolved Lead

Water Body	Coyote Creek
Stressor/Media/Beneficial Use	Dissolved Lead/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Los Angeles County Department of Public Works
Linkage between measurement endpoint and beneficial use or standard	Dissolved Lead CTR is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR is applicable to Aquatic Life.
Water Body-specific Information	Data 2-5 years old, data measured in waterbody, sample taken different seasons and years.
Data used to assess water quality	26 water samples, 18 samples exceeding.
Spatial representation	1 site (S 13).
Temporal representation	Fall, winter, spring (1997-1999).
Data type	Numerical data.
Use of standard method	Los Angeles County Department of Public Works methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances of the dissolved chronic criterion.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Coyote Creek

Dissolved Zinc

Water Body	Coyote Creek
Stressor/Media/Beneficial Use	Dissolved Zinc/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Stormwater Monitoring Program
Linkage between measurement endpoint and beneficial use or standard	Dissolved Zinc CTR criterion is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR criterion is applicable to Aquatic Life.
Water Body-specific Information	Data 2-5 years old, data measured in waterbody, sample taken different seasons and years.
Data used to assess water quality	26 water samples, 6 samples exceeding.
Spatial representation	1 site (S 14).
Temporal representation	Fall, winter, spring (1997-2000).
Data type	Numerical data.
Use of standard method	Stormwater Monitoring Program methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances of the dissolved chronic criterion.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Coyote Creek Silver

Water Body	Coyote Creek
Stressor/Media/Beneficial Use	Silver/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs and MTRLs are not linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	MTRLs and EDLs are not applicable to Aquatic Life.
Water Body-specific Information	Data was not presented.
Data used to assess water quality	Data was not presented.
Spatial representation	Data was not presented.
Temporal representation	Data was not presented.
Data type	Data was not presented.
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Historical use of pesticides.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because listing was based on EDL which are not a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are no longer a valid as a water quality standard assessment tool. In addition, MTRLs are not linked to aquatic life beneficial uses.

Region 4: Coyote Creek

Total Selenium

Water Body	Coyote Creek
Stressor/Media/Beneficial Use	Total Selenium/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Stormwater Monitoring Program
Linkage between measurement endpoint and beneficial use or standard	Total Selenium CTR criterion is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR criterion is applicable to Aquatic Life.
Water Body-specific Information	Data 2-5 years old, data measured in waterbody, stormwater events.
Data used to assess water quality	26 water samples, 5 samples exceeding.
Spatial representation	1 station.
Temporal representation	Fall 1997, fall 1998, winter-summer 1999.
Data type	Numerical data.
Use of standard method	Stormwater Monitoring Program methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances of the dissolved chronic criterion.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Dominguez Channel (Estuary to Vermont)

Copper

Water Body	Dominguez Channel (Estuary to Vermont)
Stressor/Media/Beneficial Use	Copper/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Copper ERM-PELs are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to aquatic life but using these guidelines in the absence of synoptically collected toxicity data is controversial.
Water Body-specific Information	Data 7 years old, environmental data measured at site, one-time sample, one event.
Data used to assess water quality	1 sediment sample, 1 sample exceeding.
Spatial representation	One sample only.
Temporal representation	One sample event.
Data type	Numerical data.
Use of standard method	BPTCP methods.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants for DDT, chlordane and PCBs. Stormwater runoff, aerial deposition and historical discharges for copper
Alternative Enforceable Program	BPTCP Consolidated Plan.
RWQCB Recommendation	List due to exceedances of ERM-PELs.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because it cannot be determined if the applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that the data exhibited insufficient temporal coverage. An inadequate amount of water quality measurements were collected and analyzed.</p>

Region 4: Dominguez Channel (Estuary to Vermont)

PCBs

Water Body	Dominguez Channel (Estuary to Vermont)
Stressor/Media/Beneficial Use	PCBs/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP, QAPP
Linkage between measurement endpoint and beneficial use or standard	PCB ERM-PELs are generally linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to aquatic life, however using these guidelines in the absence of synoptically collected toxicity data is controversial.
Water Body-specific Information	Data 8 years old, environmental data measured at site, one-time sample, one event.
Data used to assess water quality	1 sediment sample, 1 sample exceeding.
Spatial representation	One sample only.
Temporal representation	One sample event.
Data type	Numerical data.
Use of standard method	BPTCP methods.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants for DDT, chlordane and PCBs. Stormwater runoff, aerial deposition and historical discharges for copper.
Alternative Enforceable Program	None.
RWQCB Recommendation	List due to exceedance in ERM-PELs.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because it cannot be determined if the applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that the data exhibited insufficient temporal coverage. An inadequate amount of water quality measurements were collected.</p>

Region 4: Dominguez Channel (Estuary to Vermont)

Unknown pollutant

Water Body	Dominguez Channel (Estuary to Vermont)
Stressor/Media/Beneficial Use	Unknown pollutant/Sediment/Aquatic Life.
Data quality assessment. Extent to which data quality requirements met.	BPTCP, QAPP.
Linkage between measurement endpoint and beneficial use or standard	Sediment toxicity is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Sediment toxicity is applicable to Aquatic Life, however it has limited applicability because only one sediment sample was taken.
Water Body-specific Information	Data 7 years old, environmental data measured at site/waterbody, one-time sample.
Data used to assess water quality	1 sediment sample.
Spatial representation	One sample only.
Temporal representation	One sample event.
Data type	Numerical data.
Use of standard method	BPTCP methods.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants for DDT, chlordane and PCBs. Stormwater runoff, aerial deposition and historical discharges for copper.
Alternative Enforceable Program	None.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because it cannot be determined if the applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that the data exhibited insufficient temporal coverage. An inadequate amount of water quality measurements exceeded the water quality standard.</p>

Region 4: Dominguez Channel (Estuary to Vermont)

Chlordane

Water Body	Dominguez Channel (Estuary to Vermont)
Stressor/Media/Beneficial Use	Chlordane/Sediment/Aquatic Life.
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Chlordane ERM-PELs are generally linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to aquatic life, however using these guidelines in the absence of synoptically collected toxicity data is controversial.
Water Body-specific Information	Data 8 years old, environmental data measured at site, one-time sample, one event.
Data used to assess water quality	1 sediment sample, 1 sample exceeding.
Spatial representation	One sample only.
Temporal representation	One sample event.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants for DDT, chlordane and PCBs. Stormwater runoff, aerial deposition and historical discharges for copper.
Alternative Enforceable Program	BPTCP Consolidated Plan.
RWQCB Recommendation	List due to exceedance in ERM-PELs.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because it cannot be determined if the applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that the data exhibited insufficient temporal coverage. An inadequate amount of water quality measurements were collected and analyzed.</p>

Region 4: Dry Canyon Creek

Total Selenium

Water Body	Dry Canyon Creek
Stressor/Media/Beneficial Use	Total Selenium/Water/Aquatic Life (warm freshwater and wildlife habitat)
Data quality assessment. Extent to which data quality requirements met.	City of Calabasas
Linkage between measurement endpoint and beneficial use or standard	Total Selenium CTRs are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR is applicable to Aquatic Life.
Water Body-specific Information	Data 1-2 years, data measured at site, multiple event in different seasons.
Data used to assess water quality	32 water samples, 9 samples exceeding.
Spatial representation	Samples were collected spatially along the creek.
Temporal representation	Fall, winter, spring in different years (2000 - 2001).
Data type	Numerical data.
Use of standard method	City of Calabasas methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other site-specific information including the effects of season, storm events, and age of the data were considered. <p>An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Dry Canyon Creek

Fecal Coliform

Water Body	Dry Canyon Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	City of Calabasas
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data 1-2 years, data measured at site, seasonality and years.
Data used to assess water quality	56 samples, 11 samples exceeding.
Spatial representation	Samples were collected spatially along the creek.
Temporal representation	Fall, winter, spring in different years (2000-2001).
Data type	Numerical data.
Use of standard method	City of Calabasas methods.
Potential Source(s) of Pollutant	Natural and urban sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other site-specific information including the effects of season, storm events, and age of the data were considered. <p>An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Duck Pond Ag Drain/Mugu Drain/Oxnard Drain #2 Chem A

Water Body	Duck Pond Ag Drain/Mugu Drain/Oxnard Drain #2
Stressor/Media/Beneficial Use	Chem A/Tissue/Aquatic Life.
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	Tissue NAS guidelines are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Tissue NAS guidelines are applicable to Aquatic Life.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Historical use of pesticides.
Alternative Enforceable Program	
RWQCB Recommendation	Originally recommended for delisting because listing was based on NAS outdated guidelines. Reevaluation resulted in a recommendation to maintain the listing because Chem A group are not outdated and are still valid guidelines set by NAS to protect aquatic life.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should not be removed from the section 303(d) list because applicable NAS guidelines are not outdated, and are a valid assessment guideline.

Region 4: Echo Park Lake

Trash

Water Body	Echo Park Lake
Stressor/Media/Beneficial Use	Trash/Water/Aquatic Life, REC-2
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	TMDL Completed.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region 4: Hobie Beach (Channel Islands Harbor)

Bacterial Indicators

Water Body	Hobie Beach (Channel Islands Harbor)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County health department.
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards which are applicable to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	49 samples exceeding standards out of 97 samples.
Spatial representation	1 station: VC(36000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Hopper Creek (tributary to Santa Clara River Reach 4)

TDS

Water Body	Hopper Creek (tributary to Santa Clara River Reach 4)
Stressor/Media/Beneficial Use	TDS/Water/Agriculture
Data quality assessment. Extent to which data quality requirements met.	United Water Conservation District
Linkage between measurement endpoint and beneficial use or standard	TDS WQO is linked to Agriculture.
Utility of measure for judging if standards or uses are not attained	WQO and measurement end points are applicable to Agriculture.
Water Body-specific Information	Data 2-5 years old, samples collected at site.
Data used to assess water quality	11 water samples, 10 samples exceeding.
Spatial representation	Limited.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	United Water Conservation District methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the of age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Hopper Creek (tributary to Santa Clara River Reach 4)

Sulfate

Water Body	Hopper Creek (tributary to Santa Clara River Reach 4)
Stressor/Media/Beneficial Use	Sulfate/Water/Agriculture
Data quality assessment. Extent to which data quality requirements met.	United Water Conservation District
Linkage between measurement endpoint and beneficial use or standard	Sulfate WQO are linked to Agriculture.
Utility of measure for judging if standards or uses are not attained	WQO and measurement end points are applicable to Agriculture.
Water Body-specific Information	Data 2-5 years old, samples collected at site.
Data used to assess water quality	12 water samples, 11 sample exceeding.
Spatial representation	Limited.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	United Water Conservation District methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the of age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Lake Calabazas

Copper

Water Body	Lake Calabazas
Stressor/Media/Beneficial Use	Copper/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	EDLs not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original listing was based on EDLs which not a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Lake Calabasas

Zinc

Water Body	Lake Calabasas
Stressor/Media/Beneficial Use	Zinc/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because original listing was based on EDLs which not a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Lake Lindero

Selenium

Water Body	Lake Lindero
Stressor/Media/Beneficial Use	Selenium/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	Median International Standards (MIS) are not linked to Aquatic life. These criteria were published by the UN as a survey of member nations health protection criteria. They are not applicable with the U.S.A.
Utility of measure for judging if standards or uses are not attained	MIS are outdated guidelines and were never applicable to Aquatic Life protection.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Historical use of pesticides.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original listing was based on MIS for trace elements, which are outdated and are not valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applied Median International Standards (MIS) are obsolete, not applicable within the U.S.A. and do not represent valid assessment guidelines to measure impacts on aquatic life beneficial uses.

Region 4: Lincoln Park Lake

Trash

Water Body	Lincoln Park Lake
Stressor/Media/Beneficial Use	Trash/Water/Aquatic Life and REC-2
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	TMDL Completed.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region 4: Los Angeles Fish Harbor TBT

Water Body	Los Angeles Fish Harbor
Stressor/Media/Beneficial Use	TBT/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	TBT in sediment is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Assessment based on background levels rather than valid assessment guidelines which are not applicable to Aquatic Life.
Water Body-specific Information	Unknown.
Data used to assess water quality	Unknown.
Spatial representation	Unknown.
Temporal representation	Unknown.
Data type	Unknown.
Use of standard method	BPTCP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants. Stormwater runoff, aerial deposition, and historical discharges of metal.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original listing was based on exceeding background levels rather than valid assessment guidelines.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because the original listing was based on exceeding background levels rather than valid assessment guidelines.

Region 4: Los Angeles Harbor Inner Breakwater TBT

Water Body	Los Angeles Harbor Inner Breakwater
Stressor/Media/Beneficial Use	TBT/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP-QAPP
Linkage between measurement endpoint and beneficial use or standard	TBT in sediment is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Assessment based on background levels rather than valid assessment guideline which is not applicable to Aquatic Life.
Water Body-specific Information	Unknown.
Data used to assess water quality	Unknown.
Spatial representation	Unknown.
Temporal representation	Unknown.
Data type	Unknown.
Use of standard method	BPTCP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants. Stormwater runoff, aerial deposition, and historical discharges of metal.
Alternative Enforceable Program	
RWQCB Recommendation	Delist the original listing was based on exceeding background levels rather than valid assessment guidelines.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because the original listing was based on exceeding background levels rather than valid assessment guidelines.

Region 4: Los Angeles Harbor Main Channel TBT

Water Body	Los Angeles Harbor Main Channel
Stressor/Media/Beneficial Use	TBT/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	TBT in sediment is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Assessment based on background levels rather than valid assessment guideline which is not applicable to Aquatic Life.
Water Body-specific Information	Unknown.
Data used to assess water quality	Unknown.
Spatial representation	Unknown.
Temporal representation	Unknown.
Data type	Unknown.
Use of standard method	BPTCP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants. Stormwater runoff, aerial deposition, and historical discharges of metal
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original listing was based on exceeding background levels rather than valid assessment guidelines.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because the original listing was based on exceeding background levels rather than valid assessment guidelines.

Region 4: Los Angeles Harbor-Consolidated Slip Toxaphene

Water Body	Los Angeles Harbor-Consolidated Slip
Stressor/Media/Beneficial Use	Toxaphene/Tissue/COMM
Data quality assessment. Extent to which data quality requirements met.	SMWP
Linkage between measurement endpoint and beneficial use or standard	Toxaphene MTRLs are linked to COMM.
Utility of measure for judging if standards or uses are not attained	MTRLs are applicable to COMM.
Water Body-specific Information	Data 4-9 years old, environmental data measured at site/waterbody, species present, samples collected in 1993, 1995, 1997 and 1998.
Data used to assess water quality	4 tissue samples (67%) exceeded the water quality standard. The RWQCB provided the adequate data that was inadvertently missing in their original fact sheet.
Spatial representation	Unknown.
Temporal representation	Samples were collected in 1993, 1995, 1997 and 1998.
Data type	Numerical.
Use of standard method	SMWP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff, aerial deposition, and historical discharges for metals.
Alternative Enforceable Program	BPTCP Consolidated Cleanup Plan.
RWQCB Recommendation	List due to exceedances in MTRLs.
SWRCB Staff Recommendation	<p>In the review of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. The RWQCB provided the appropriate data, that was inadvertently missing in their original fact sheet, to support the listing of this water body-pollutant combination.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including the age of the data were considered.

Region 4: Los Angeles Harbor-Consolidated Slip Toxaphene

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 4: Los Angeles Harbor-Consolidated Slip Cadmium

Water Body	Los Angeles Harbor-Consolidated Slip
Stressor/Media/Beneficial Use	Cadmium/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Benthic community effects, sediment toxicity, and ERM-PEL is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Effects data, toxicity data, and ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 6 years old, one-time sample event, one season event.
Data used to assess water quality	14 sediment sample, 6 samples exceeding for Cadmium. Eight associated sediment samples had significant toxicity and four sediment stations had a degraded benthic community.
Spatial representation	Samples were collected spatially.
Temporal representation	One-time sample.
Data type	Numerical data.
Use of standard method	BPTCP methods were used.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff, aerial deposition, and historical discharges for metals.
Alternative Enforceable Program	The Consolidated Toxic Hot Spots Cleanup Plan describes how the Los Angeles Contaminated Task Force will develop a plan for the cleanup of this site. While the planning has progressed, no remediation of the site has occurred. No responsible parties have been identified.
RWQCB Recommendation	List due to exceedances of ERM/PEL sediment thresholds.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses are applicable and apply to this water body. 4. The evaluation guideline used to interpret narrative water quality standards is adequate. 5. Data are numerical. 6. Standard methods were used.

Region 4: Los Angeles Harbor-Consolidated Slip Cadmium

An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 4: Los Angeles Harbor-Consolidated Slip Copper

Water Body	Los Angeles Harbor-Consolidated Slip
Stressor/Media/Beneficial Use	Copper/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Benthic community effects, sediment toxicity, and ERM-PEL is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Effects data, toxicity data, and ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 6-10 years old, environmental data measured at site/waterbody.
Data used to assess water quality	19 sediment samples, 19 samples exceeding ERMs-PELs for Copper. Eight associated sediment samples had significant toxicity and four sediment stations had a degraded benthic community.
Spatial representation	Samples were collected spatially.
Temporal representation	3 different year and seasons.
Data type	Numerical data.
Use of standard method	BPTCP methods were used.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff, aerial deposition, and historical discharges for metals.
Alternative Enforceable Program	The Consolidated Toxic Hot Spots Cleanup Plan describes how the Los Angeles Contaminated Task Force will develop a plan for the cleanup of this site. While the planning has progressed, no remediation of the site has occurred. No responsible parties have been identified.
RWQCB Recommendation	List due to exceedances in ERM/PEL sediment thresholds.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses are applicable and apply to this water body. 4. The evaluation guideline used to interpret narrative water quality standards is adequate. 5. Data are numerical. 6. Standard methods were used.

Region 4: Los Angeles Harbor-Consolidated Slip Copper

An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 4: Los Angeles Harbor-Consolidated Slip Dieldrin

Water Body	Los Angeles Harbor-Consolidated Slip
Stressor/Media/Beneficial Use	Dieldrin/Tissue/COMM
Data quality assessment. Extent to which data quality requirements met.	SMWP
Linkage between measurement endpoint and beneficial use or standard	Dieldrin MTRLs are linked to COMM.
Utility of measure for judging if standards or uses are not attained	MTRLs are applicable to COMM.
Water Body-specific Information	Data 7-9 years old, environmental data measured at site/waterbody, samples collected during 2 different seasons and years.
Data used to assess water quality	3 tissue samples, 3 samples exceeding.
Spatial representation	Samples were collected spatially.
Temporal representation	Samples were collected temporally.
Data type	Numerical data.
Use of standard method	SMWP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff, aerial deposition, and historical discharges for metals.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedance in MTRLs.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate, quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including the age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Los Angeles Harbor-Consolidated Slip

Zinc

Water Body	Los Angeles Harbor-Consolidated Slip
Stressor/Media/Beneficial Use	Zinc/Tissue
Data quality assessment. Extent to which data quality requirements met.	SMWP
Linkage between measurement endpoint and beneficial use or standard	There is not a linkage to beneficial use.
Utility of measure for judging if standards or uses are not attained	Assessment based on background levels rather than valid assessment guideline which is not applicable to aquatic life.
Water Body-specific Information	Unknown.
Data used to assess water quality	Unknown.
Spatial representation	Samples were collected spatially.
Temporal representation	Samples were collected temporally.
Data type	Numerical.
Use of standard method	SMWP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff, aerial deposition, and historical discharges for metals.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original listing was based on exceeding background levels rather than valid assessment guidelines.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because the original listing was based on exceeding background levels rather than valid assessment guidelines.

Region 4: Los Angeles Harbor-Consolidated Slip TBT

Water Body	Los Angeles Harbor-Consolidated Slip
Stressor/Media/Beneficial Use	TBT/Tissue/COMM
Data quality assessment. Extent to which data quality requirements met.	SMWP
Linkage between measurement endpoint and beneficial use or standard	SMWP data is linked to COMM.
Utility of measure for judging if standards or uses are not attained	Assessment based on background levels rather than valid assessment guideline which is not applicable to COMM.
Water Body-specific Information	Unknown.
Data used to assess water quality	Unknown.
Spatial representation	Samples were collected spatially.
Temporal representation	Samples were collected temporally.
Data type	Numerical data.
Use of standard method	SMWP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff, aerial deposition, and historical discharges for metals.
Alternative Enforceable Program	BPTCP Consolidated Cleanup Plan.
RWQCB Recommendation	Delist because the original listing was based on exceeding background levels rather than valid assessment of guidelines. Delisting applies to LA Harbor Consolidated Slip, Fish Harbor, Inner Breakwater and Main Channel).
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because the original listing was based on exceeding background levels rather than valid assessment guidelines.

Region 4: Los Angeles Harbor-Consolidated Slip Arsenic

Water Body	Los Angeles Harbor-Consolidated Slip
Stressor/Media/Beneficial Use	Arsenic/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Arsenic ERM-PELs are linked Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data was not presented.
Data used to assess water quality	Data was not presented.
Spatial representation	Data was not presented.
Temporal representation	Data was not presented.
Data type	Numerical data.
Use of standard method	BPTCP and SMWP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff, aerial deposition, and historical discharges for metals.
Alternative Enforceable Program	BPTCP Consolidated Cleanup Plan.
RWQCB Recommendation	Inadvertently listed. Reevaluation of data revealed that arsenic did not exceed ERM or PEL sediment thresholds.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because the water body was inadvertently listed and applicable sediment thresholds are not exceeded.

Region 4: Los Angeles Harbor-Consolidated Slip Nickel

Water Body	Los Angeles Harbor-Consolidated Slip
Stressor/Media/Beneficial Use	Nickel/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Benthic community effects, sediment toxicity, and ERM-PEL is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Effects data, toxicity data, and ERM-PELs are applicable to aquatic life beneficial uses. There were 5 samples exceeding in the PEL guideline for nickel, however ERMs were not exceeded. Toxicity and sediment chemistry data was collected synoptically.
Water Body-specific Information	Data 8-10 years old, environmental data measured at site/waterbody, 2 seasons monitored in 2 different years.
Data used to assess water quality	5 sediment chemistry samples, 5 samples exceeding. Sediment toxicity data was observed in synoptically collected samples. Nickel is not identified in the Consolidated Toxic Hot Spots Cleanup Plan as a chemical contributing to the creation or maintenance of the toxic hot spot.
Spatial representation	Samples were collected spatially.
Temporal representation	3 different year (1992 and 1994) and seasons
Data type	Numerical data.
Use of standard method	BPTCP methods were used.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff, aerial deposition, and historical discharges for metals.
Alternative Enforceable Program	None.
RWQCB Recommendation	List due to exceedance of ERM/PEL sediment thresholds.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses apply to the water body.4. Water quality standard used is applicable.5. The evaluation guideline used to interpret narrative water quality standards is adequate.6. Data are numerical.7. Standard were used.

Region 4: Los Angeles Harbor-Consolidated Slip Nickel

8. Other water body- or site-specific information including the effects of season and age of the data were considered.

All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 4: Los Angeles Harbor-Consolidated Slip Mercury

Water Body	Los Angeles Harbor-Consolidated Slip
Stressor/Media/Beneficial Use	Mercury/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Benthic community effects, sediment toxicity, and ERM-PEL is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Effects data, toxicity data, and ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 6-10 years old, environmental data measured at site/waterbody, 3 years-3 seasons.
Data used to assess water quality	19 sediment samples, 5 samples exceeding ERM-PEL for Mercury. Eight associated sediment samples had significant toxicity and four sediment stations had a degraded benthic community.
Spatial representation	Samples were collected spatially.
Temporal representation	3 different year and seasons.
Data type	Numerical data.
Use of standard method	BPTCP methods were used.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff, aerial deposition, and historical discharges for metals.
Alternative Enforceable Program	The Consolidated Toxic Hot Spots Cleanup Plan describes how the Los Angeles Contaminated Task Force will develop a plan for the cleanup of this site. While the planning has progressed, no remediation of the site has occurred. No responsible parties have been identified.
RWQCB Recommendation	List due to exceedance of ERM/PEL sediment thresholds.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses are applicable and apply to this water body. 4. The evaluation guideline used to interpret narrative water quality standards is adequate. 5. Data are numerical. 6. Standard methods were used. <p>An adequate amount of the water quality measurements exceeded the water</p>

Region 4: Los Angeles Harbor-Consolidated Slip Mercury

quality standard. The staff confidence that standards were exceeded is moderate.

Region 4: Los Angeles River Estuary (Queensway Bay)

DDT

Water Body	Los Angeles River Estuary (Queensway Bay)
Stressor/Media/Beneficial Use	DDT/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	DDT ERM-PELs are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 4-10 years old, data measured at site, data measured in different years.
Data used to assess water quality	9 samples, 6 samples exceeding. Four out of six sediment samples were found to be significantly toxic to amphipods. The benthic community was classified as transitional.
Spatial representation	Samples were collected spatially.
Temporal representation	Samples taken in 2 different years.
Data type	Numerical data.
Use of standard method	BPTCP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedance in ERM/PELs guidelines.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Los Angeles River Estuary (Queensway Bay)

Chlordane

Water Body	Los Angeles River Estuary (Queensway Bay)
Stressor/Media/Beneficial Use	Chlordane/sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Chlordane ERM-PELs are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 4-10 years old, data measured at site, data measured in different years.
Data used to assess water quality	9 sediment samples, 9 samples exceeding. Four out of six sediment samples were found to be significantly toxic to amphipods. The benthic community was classified as transitional.
Spatial representation	Samples were collected spatially.
Temporal representation	Samples taken in 2 different years.
Data type	Numerical data.
Use of standard method	BPTCP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances in ERM/PELs.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Los Angeles River Estuary (Queensway Bay)

Lead

Water Body	Los Angeles River Estuary (Queensway Bay)
Stressor/Media/Beneficial Use	Lead/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Lead ERM/PELs in sediment are linked to Aquatic Life .
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 4-10 years old, data measured at site, data measured in different years.
Data used to assess water quality	18 sediment samples, 8 samples exceeding. Four out of six sediment samples were found to be significantly toxic to amphipods. The benthic community was classified as transitional.
Spatial representation	Samples were collected spatially.
Temporal representation	Samples collected in 2 different years.
Data type	Numerical data.
Use of standard method	BPTCP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances in ERM/PEL assessment guidelines.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Los Angeles River Estuary (Queensway Bay)

Zinc

Water Body	Los Angeles River Estuary (Queensway Bay)
Stressor/Media/Beneficial Use	Zinc/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Zinc ERM-PELs are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 1-5 years old, measured at site during three different years.
Data used to assess water quality	27 samples, 5 samples exceeding. Four out of six sediment samples were found to be significantly toxic to amphipods. The benthic community was classified as transitional.
Spatial representation	Samples collected spatially.
Temporal representation	Samples collected during three different years.
Data type	Numerical data.
Use of standard method	BPTCP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances in ERM-PEL guidelines.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses have been established and apply to the water body.7. Water quality standard used is applicable.8. The evaluation guideline used to interpret narrative water quality standards is adequate.9. Data are numerical.7. Standard methods were used.8. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Los Angeles River Estuary (Queensway Bay)

PCBs

Water Body	Los Angeles River Estuary (Queensway Bay)
Stressor/Media/Beneficial Use	PCBs/sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	PCBs ERM/PELs in sediment is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 4-10 years old, data measured at site, data measured in different years.
Data used to assess water quality	18 samples, 2 samples exceeding. Four out of six sediment samples were found to be significantly toxic to amphipods. The benthic community was classified as transitional.
Spatial representation	Samples were collected spatially.
Temporal representation	Samples taken in 2 different years.
Data type	Numerical data.
Use of standard method	BPTCP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances of ERM-PELs sediment quality guideline.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is low.</p>

Region 4: Los Angeles River Reach 1 (Estuary to Carson Street)

Dissolved Cadmium

Water Body	Los Angeles River Reach 1 (Estuary to Carson Street)
Stressor/Media/Beneficial Use	Dissolved Cadmium/Water/Aquatic Life (Warm, Wildlife Habitat)
Data quality assessment. Extent to which data quality requirements met.	Los Angeles County Stormwater Program
Linkage between measurement endpoint and beneficial use or standard	Cadmium CTR criterion is linked to Aquatic Life and Drinking Water standard CA Code title 22.
Utility of measure for judging if standards or uses are not attained	CTR criterion is applicable to Aquatic Life.
Water Body-specific Information	Data 3-5 years old, data measured in waterbody, sample taken different seasons and years.
Data used to assess water quality	18 water samples, 4 samples exceeding (acute), 6 samples exceeding (chronic), 2 samples exceeding (CTR Title 22).
Spatial representation	Samples were collected mostly in main stem of Los Angeles River.
Temporal representation	Fall, winter, fall, spring (1997-1999).
Data type	Numerical data.
Use of standard method	LA County Stormwater Monitoring Program.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to a greater than 10% exceedance of dissolved and total cadmium water quality criteria for protection of freshwater aquatic life and potential drinking water sources.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other site-specific information including the effects of season, storm events, and age of the data were considered. <p>An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Los Angeles River Reach 1 (Estuary to Carson Street)

Dissolved Copper

Water Body	Los Angeles River Reach 1 (Estuary to Carson Street)
Stressor/Media/Beneficial Use	Dissolved Copper/ Water/Aquatic Life (warm-freshwater and wildlife habitat)
Data quality assessment. Extent to which data quality requirements met.	Los Angeles County Stormwater Program
Linkage between measurement endpoint and beneficial use or standard	Copper CTR is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR is applicable to Aquatic Life.
Water Body-specific Information	Data 2-5 years old, data measured in waterbody, sample taken different seasons and years.
Data used to assess water quality	18 water samples, 11 samples exceeding (acute), 13 samples exceeding (chronic).
Spatial representation	Samples were collected mostly in main stem of Los Angeles River.
Temporal representation	Fall, winter, spring (1997-1999).
Data type	Numerical data.
Use of standard method	Los Angeles County Stormwater Program.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to a greater than 10% exceedance of dissolved copper water quality criteria for protection of freshwater aquatic life.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including the effects of season, storm events, and age of the data were considered.

Region 4: Los Angeles River Reach 1 (Estuary to Carson Street)
Dissolved Copper

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 4: Los Angeles River Reach 1 (Estuary to Carson Street)

Dissolved Zinc

Water Body	Los Angeles River Reach 1 (Estuary to Carson Street)
Stressor/Media/Beneficial Use	Dissolved Zinc/Water/Aquatic Life (warm-freshwater and wildlife habitat)
Data quality assessment. Extent to which data quality requirements met.	Los Angeles County Stormwater Program
Linkage between measurement endpoint and beneficial use or standard	Zinc CTR is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTRs are applicable to Aquatic Life.
Water Body-specific Information	Data 2-5 years old, data measured in waterbody, sample taken different seasons and years.
Data used to assess water quality	18 water samples, 7 samples exceeding (acute and chronic criteria).
Spatial representation	Samples were collected mainly in the main stem of the LA River.
Temporal representation	Fall, winter in different years.
Data type	Numerical data.
Use of standard method	Los Angeles County Stormwater Monitoring Program.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to a greater than 10% exceedance of dissolved zinc acute and chronic water quality criteria for protection of freshwater Aquatic Life.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season, storm events, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Los Angeles River Reach 1 (Estuary to Carson Street)

Trash

Water Body	Los Angeles River Reach 1 (Estuary to Carson Street)
Stressor/Media/Beneficial Use	Trash/Water/Aquatic Life and REC-2
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	TMDL Completed.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region 4: Los Angeles River Reach 1 (Estuary to Carson Street)

Total Aluminum

Water Body	Los Angeles River Reach 1 (Estuary to Carson Street)
Stressor/Media/Beneficial Use	Total Aluminum/Water/Groundwater Recharge
Data quality assessment. Extent to which data quality requirements met.	Los Angeles County Stormwater Program
Linkage between measurement endpoint and beneficial use or standard	WQO for Aluminum Maximum Concentration Levels (MCLs) are linked to Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	MCLs are applicable to Groundwater Recharge.
Water Body-specific Information	Data is 3-5 year old, data measured in the waterbody, samples collected different in seasons and years.
Data used to assess water quality	18 water samples, 10 samples exceeding.
Spatial representation	Samples were collected mainly in the main stem of the LA River.
Temporal representation	Fall-1997, winter- fall 1998, winter 1999.
Data type	Numerical data.
Use of standard method	TSMP.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including the effects of season, storm events, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Los Angeles River Reach 2 (Carson to Figueroa Street)

Trash

Water Body	Los Angeles River Reach 2 (Carson to Figueroa Street)
Stressor/Media/Beneficial Use	Trash/Water/Aquatic Life and REC-2
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	TMDL Completed.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region 4: Los Angeles River Reach 3 (Figueroa Street to Riverside Drive + Trash)

Water Body	Los Angeles River Reach 3 (Figueroa Street to Riverside Drive)
Stressor/Media/Beneficial Use	Trash/Water/Aquatic Life and REC-2
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	TMDL Completed.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region 4: Los Angeles River Reach 4 (Sepulveda Drive to Sepulveda Dam + Trash

Water Body	Los Angeles River Reach 4 (Sepulveda Drive to Sepulveda Dam)
Stressor/Media/Beneficial Use	Trash/Water/Aquatic Life and REC-2
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	TMDL Completed.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region 4: Los Angeles River Reach 5 (At Sepulveda Basin)

Trash

Water Body	Los Angeles River Reach 5 (At Sepulveda Basin)
Stressor/Media/Beneficial Use	Trash/Water/Aquatic Life and REC-2
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	TMDL Completed.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region 4: Los Angeles River Reach 5 (within Sepulveda Basin)

Chem A

Water Body	Los Angeles River Reach 5 (within Sepulveda Basin)
Stressor/Media/Beneficial Use	Chem A/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Unknown
Linkage between measurement endpoint and beneficial use or standard	Chem A NAS guidelines are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	NAS guidelines are applicable to Aquatic Life.
Water Body-specific Information	Data age is 10 years old.
Data used to assess water quality	1 tissue sample, 0 samples exceeding. This water body-pollutant was listed on the 1996 303 (d) list in error by the RWQCB. The Chem A in this tissue sample collected in 1992 did not exceed the NAS Chem A guideline.
Spatial representation	One site.
Temporal representation	One time sample.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because Chem A did not exceed the NAS guidelines in tissue.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because there is insufficient evidence to support listing the pollutant. The original listing was made in error by the RWQCB in 1996. The tissue sample collected in 1992 was below the NAS tissue guideline for Chem A.</p> <p>This conclusion is based on the staff findings that the data exhibited insufficient spatial and temporal coverage.</p> <p>An adequate number of the water quality measurements did not exceed the water quality standard. The staff confidence that standards were exceeded is low.</p>

Region 4: Los Angeles River Reach 5 (within Sepulveda Basin) Chlorpyrifos

Water Body	Los Angeles River Reach 5 (within Sepulveda Basin)
Stressor/Media/Beneficial Use	Chlorpyrifos/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not an applicable assessment guideline.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original listing was based on EDLs which are not a valid assessment guideline.
SWRCB Staff Recommendation	In the review of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Los Cerritos Channel

Chlordane

Water Body	Los Cerritos Channel
Stressor/Media/Beneficial Use	Chlordane/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Chlordane ERMs-PELs are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERMs-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 8-9 years old, data measured at site, measured during the winter.
Data used to assess water quality	4 sediment samples, 3 samples exceeding 4 sediment toxicity test samples, 3 samples toxic
Spatial representation	Data was collected spatially.
Temporal representation	Winter 1993 and 1994.
Data type	Numerical data.
Use of standard method	BPTCP.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other site-specific information including the effects of season, storm events, and age of the data were considered. <p>An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Los Cerritos Channel

Unknown

Water Body	Los Cerritos Channel
Stressor/Media/Beneficial Use	Unknown/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Sediment toxicity is linkage to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Sediment toxicity is applicable to Aquatic Life, however guidelines use are unknown.
Water Body-specific Information	Data 9-10 years old, samples taken at site.
Data used to assess water quality	4 sediment samples, 3 toxic samples.
Spatial representation	Unknown.
Temporal representation	Samples taken in 1993 and in 1994.
Data type	Numerical data.
Use of standard method	BPTCP.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	List for sediment toxicity.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because sediment toxicity is a condition of a water body. Pollutants such as chlordane contribute to or cause the observed toxicity.

Region 4: Machado Lake (Harbor Park Lake)

Chem A

Water Body	Machado Lake (Harbor Park Lake)
Stressor/Media/Beneficial Use	Chem A/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	Chem A tissue NAS guidelines are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	NAS guidelines are applicable to Aquatic Life.
Water Body-specific Information	Data was not presented.
Data used to assess water quality	Data was not presented.
Spatial representation	Data was not presented.
Temporal representation	Data was not presented.
Data type	Numerical data.
Use of standard method	TSMP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	Originally recommended for delisting because listing was based on NAS outdated guidelines. Reevaluation resulted in a recommendation to maintain on list because Chem A group are not outdated and are still valid guidelines set by NAS to protect aquatic life.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should not be removed from the section 303(d) list because applicable NAS guidelines are not outdated, and are a valid assessment guideline.

Region 4: Malibou Lake PCB

Water Body	Malibou Lake
Stressor/Media/Beneficial Use	PCB/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP.
Linkage between measurement endpoint and beneficial use or standard	PCB Tissue chemistry (MTRLs) are not linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	MTRLs are not applicable to Aquatic Life.
Water Body-specific Information	Data is 5 -10 years old, measured at site, species present, two sampling event.
Data used to assess water quality	PCBs were not detected in the two tissue samples collected 1992 and 1997. This water body was originally recommended to be removed from the section 303(d) list by the RWQCB. The SWRCB staff recommended to maintain the listing because the data was not presented to support delisting. In December 2002, the RWQCB included data to support the delisting.
Spatial representation	Two tissue samples.
Temporal representation	Samples were collected in 1992 and 1997.
Data type	Numerical data.
Use of standard method	TSMP.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because PCBs in tissue were not detected in 1992 and 1997.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list. The RWQCB provided recent data to support removing this waterbody-pollutant from the 303(d) list. This conclusion is based on the staff findings that: 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. The evaluation guideline used to interpret narrative water quality standards is adequate. 4. Numerical data were presented. 5. Standard methods were used. None of quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.

Region 4: Malibou Lake

Copper

Water Body	Malibou Lake
Stressor/Media/Beneficial Use	Copper/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are not valid assessment guidelines.
SWRCB Staff Recommendation	In the review of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Malibou Lake Chlordane

Water Body	Malibou Lake
Stressor/Media/Beneficial Use	Chlordane/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	MTRLs are not linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	MTRLs are not applicable to Aquatic Life.
Water Body-specific Information	Data is 5 -10 years old, measured at site, species present, two sampling event.
Data used to assess water quality	2 tissue samples, 0 samples exceeding. Originally, this water body was recommended to be removed from the section 303(d) list by the RWQCB in May 2002. SWRCB staff recommended to maintain the listing because the data was not presented to support delisting. In December 2002, the RWQCB included data to support the delisting. The tissue sample collected in 1992 is below the Chlordane MTRL guideline and chlordane was not detected in a 1997 tissue sample.
Spatial representation	Two tissue samples.
Temporal representation	Samples were collected in 1992 and 1997.
Data type	Numerical data.
Use of standard method	TSMP.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Delist is based on one sample which is now below the MTRL and chlordane was not detected in 1997.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the RWQCB provided recent data to that support water quality standards were not exceeded. The tissue sample collected in 1992 is now below the Chlordane MTRL guideline and chlordane was not detected in the 1997 tissue sample. This conclusion is based on the staff findings that: 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. The evaluation guideline used to interpret narrative water quality standards is adequate. 4. Data are numerical. 5. Standard methods were used.

Region 4: Malibou Lake

Chlordane

8. Other water body information including age of the data were considered.

None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is low.

Region 4: Malibu Creek

Total Selenium

Water Body	Malibu Creek
Stressor/Media/Beneficial Use	Total Selenium/Water/Aquatic Life (warm and cold freshwater and wildlife habitat, rare and endangered sp., migration of aquatic org, spawn-reproduction), REC-1 and REC-2
Data quality assessment. Extent to which data quality requirements met.	Stormwater Monitoring Program
Linkage between measurement endpoint and beneficial use or standard	Total Selenium CTR is Linked to Aquatic Life Beneficial, however unclear on the linkage to REC-1 and REC-2.
Utility of measure for judging if standards or uses are not attained	CTRs are applicable to Aquatic Life.
Water Body-specific Information	Data 3-5 years old, samples collected at site, samples collected different years during storm event.
Data used to assess water quality	21 water samples, 2 samples exceeding.
Spatial representation	1 site.
Temporal representation	Samples taken winter-1997; fall and winter 1999.
Data type	Numerical data.
Use of standard method	Stormwater Monitoring Program.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to a greater than one exceedance of the total selenium chronic water quality criterion to protect freshwater aquatic life.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if applicable water quality standards are exceeded, a pollutant or pollution contributes or causes any standards exceedance. There was an inadequate number of samples that exceeded CTR/Basin Plan WQO criteria for listing.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited insufficient spatial and temporal coverage. Also, the two exceeding samples were collected in the same month and year. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the of age of the data were considered.

Region 4: Malibu Creek

Total Selenium

An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.

Region 4: Malibu Creek Watershed [Malibu Creek, Las Virgenes Creek, T + Sedimentation]

Water Body	Malibu Creek Watershed [Malibu Creek, Las Virgenes Creek, Triunfo Creek (R1 and R2) and Medea Creek (R1 and R2)]
Stressor/Media/Beneficial Use	Sedimentation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	DFG (Heal the Bay Study)
Linkage between measurement endpoint and beneficial use or standard	Sedimentation and bioassessment are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Bioassessment measurements are applicable to Aquatic Life.
Water Body-specific Information	Data 1 year old, collected at sites, species present, sample collected Spring and fall 2000.
Data used to assess water quality	Bioassessment of micro invertebrate stream community assemblage and physical habitat data submitted by Heal the bay and reviewed by CDFG staff.
Spatial representation	11 sites.
Temporal representation	Spring and Fall 2000.
Data type	Numerical data.
Use of standard method	DFG (California Stream Bioassessment Procedure) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	List due to excessive sedimentation.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p><i>This conclusion is based on the staff findings that:</i></p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including the effects of season and age of the data were considered. <p>An adequate amount of bioassessment measurements indicated biological community degradation.</p>

Region 4: Malibu Lagoon

pH

Water Body	Malibu Lagoon
Stressor/Media/Beneficial Use	pH/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Las Virgenas NPDES Municipal Water District
Linkage between measurement endpoint and beneficial use or standard	pH WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data 3-5 years old, data measured at site, measured during all seasons.
Data used to assess water quality	138 water samples, 33 samples exceeding pH 8.5
Spatial representation	pH data was collected at various monitoring stations within the lagoon.
Temporal representation	Winter 1997, Summer-Winter 1998, Winter- Fall 1999.
Data type	Numerical data.
Use of standard method	Las Virgenas NPDES Municipal Water District.
Potential Source(s) of Pollutant	Unknown (potential sources septic systems, storm drains and birds).
Alternative Enforceable Program	
RWQCB Recommendation	List due to pH exceedances above of 8.5.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body information including the age of the data were considered. <p>An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Mandalay Beach Beach Closures

Water Body	Mandalay Beach
Stressor/Media/Beneficial Use	Beach Closures/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Ventura County Environmental Health Division
Linkage between measurement endpoint and beneficial use or standard	Beach Closures are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQOs are applicable to REC-1.
Water Body-specific Information	Data = 0 - 3 years old. Data measured at waterbody. No beach closures in the last 3 years.
Data used to assess water quality	No Beach Closures in the last 3 years.
Spatial representation	Unknown.
Temporal representation	Unknown.
Data type	Narrative.
Use of standard method	Ventura County Environmental Health Division.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because there were no Beach Closures in the last 3 years.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.

Region 4: Marina del Rey Harbor-Back Basin

Copper

Water Body	Marina del Rey Harbor-Back Basin
Stressor/Media/Beneficial Use	Copper/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	Numerical data.
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs do not represent a valid assessment guideline.
SWRCB Staff Recommendation	In the review of the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Marina del Rey Harbor-Back Basin

Lead

Water Body	Marina del Rey Harbor-Back Basin
Stressor/Media/Beneficial Use	Lead/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	Numerical data.
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs does not represent a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Marina del Rey Harbor-Back Basin

DDT

Water Body	Marina del Rey Harbor-Back Basin
Stressor/Media/Beneficial Use	DDT/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP, TSMP
Linkage between measurement endpoint and beneficial use or standard	DDT ERM/PELs are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM/PELs are applicable to Aquatic Life.
Water Body-specific Information	Data is 5-9 years old.
Data used to assess water quality	18 sediment samples, 3 samples exceeding. Data was omitted in the RWQCB's original fact sheets. In December 2002, the RWQCB include adequate data (toxicity, benthic community assessment and sediment chemistry) to support the delisting. The three samples that exceeded the DDT ERM/PEL guideline were collected in 1994.
Spatial representation	Unknown.
Temporal representation	Samples were collected in 1993, 1994, 1996, and 1997.
Data type	Numerical.
Use of standard method	BPTCP, TSMP.
Potential Source(s) of Pollutant	Historical use of pesticides, stormwater runoff/aerial deposition from urban areas.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because DDT sediment concentrations have dropped below ERM-PEL guidelines.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the list because the RWQCB presented data to support that water quality standards were not exceeded. Data was omitted in the RWQCB's original fact sheets.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. The evaluation guideline used to interpret narrative water quality standards is adequate.6. Data are numerical.7. Standard methods were used.8. Other water body information including age of the data were considered.

Region 4: Marina del Rey Harbor-Back Basin DDT

An inadequate of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 4: Marina del Rey Harbor-Back Basin PCBs

Water Body	Marina del Rey Harbor-Back Basin
Stressor/Media/Beneficial Use	PCBs/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP, TSMP
Linkage between measurement endpoint and beneficial use or standard	PCB ERM/PELs are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 5- 9 years old, collected at site, data collected in different years and seasons.
Data used to assess water quality	18 sediment samples, 7 samples exceeding samples.
Spatial representation	Samples were collected spatially.
Temporal representation	Summer-winter 1993, summer 1996, fall-winter 1997.
Data type	Numerical data.
Use of standard method	BPTCP and TSMP
Potential Source(s) of Pollutant	Historical use of pesticides, stormwater runoff/aerial deposition from urban areas.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Region 4: Marina del Rey Harbor-Back Basin

Zinc

Water Body	Marina del Rey Harbor-Back Basin
Stressor/Media/Beneficial Use	Zinc/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs do not represent a valid assessment guidelines.
SWRCB Staff Recommendation	In the review of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Marina Del Rey Harbor-Back Basin

Unknown

Water Body	Marina Del Rey Harbor-Back Basin
Stressor/Media/Beneficial Use	Unknown (Benthic Community Degradation)/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP.
Linkage between measurement endpoint and beneficial use or standard	Benthic Community Degradation is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Data was not presented.
Water Body-specific Information	Data was not presented.
Data used to assess water quality	Data was not presented.
Spatial representation	Data was not presented.
Temporal representation	Data was not presented.
Data type	Data was not presented.
Use of standard method	BPTCP.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because benthic infauna is only moderately degraded.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because the information indicates that the benthic community infauna is moderately degraded.

Region 4: Marina del Rey Harbor-Back Basin TBT

Water Body	Marina del Rey Harbor-Back Basin
Stressor/Media/Beneficial Use	TBT/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs no longer represent a valid assessment guideline.
SWRCB Staff Recommendation	In the review of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: McCoy Canyon Creek

Total Selenium

Water Body	McCoy Canyon Creek
Stressor/Media/Beneficial Use	Total Selenium/Water/Aquatic Life, Warm Freshwater and Wildlife Habitat
Data quality assessment. Extent to which data quality requirements met.	City of Calabasas
Linkage between measurement endpoint and beneficial use or standard	Total Selenium CTR is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR is applicable to Aquatic Life
Water Body-specific Information	Data 1-2 years old, samples collected during multiple seasons.
Data used to assess water quality	33 water samples, 32 samples exceeding.
Spatial representation	Samples were collected spatially along the creek.
Temporal representation	Spring, fall, winter.
Data type	Numerical data.
Use of standard method	City of Calabasas.
Potential Source(s) of Pollutant	Natural and urban sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>In the review of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body information including the effects of season, storm events, and age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: McCoy Canyon Creek

Nitrate

Water Body	McCoy Canyon Creek
Stressor/Media/Beneficial Use	Nitrate/Water/Groundwater Recharge
Data quality assessment. Extent to which data quality requirements met.	City of Calabasas
Linkage between measurement endpoint and beneficial use or standard	Nitrate WQO is linked to Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Groundwater Recharge.
Water Body-specific Information	Data 1-2 years, data measured at site, sample during multiple seasons.
Data used to assess water quality	51 water samples, 19 samples exceeding.
Spatial representation	Samples were collected spatially along the creek.
Temporal representation	Spring, summer, fall, winter.
Data type	Numerical data.
Use of standard method	City of Calabasas
Potential Source(s) of Pollutant	Nonpoint sources
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season, storm events, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: McCoy Canyon Creek

Fecal Coliform

Water Body	McCoy Canyon Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	City of Calabasas
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data 1-3 years old, data measured at site, all season samples.
Data used to assess water quality	56 bacterial samples, 38 samples exceeding.
Spatial representation	Samples were collected spatially along the creek.
Temporal representation	Spring, summer, fall, winter.
Data type	Numerical data.
Use of standard method	City of Calabasas.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body information including the effects of season, storm events, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: McCoy Canyon Creek

Nitrate as Nitrogen

Water Body	McCoy Canyon Creek
Stressor/Media/Beneficial Use	Nitrate as Nitrogen/Water/Groundwater Recharge
Data quality assessment. Extent to which data quality requirements met.	Unknown
Linkage between measurement endpoint and beneficial use or standard	Maximum Contamination Levels (MCL) are linked Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	MCL are applicable to Groundwater Recharge.
Water Body-specific Information	Data 1-2 years, data measured at site, sample during multiple seasons.
Data used to assess water quality	51 water samples, 19 samples exceeding.
Spatial representation	Samples were collected spatially along the creek.
Temporal representation	Spring-summer-fall 2000 and winter-spring 2001.
Data type	Numerical data.
Use of standard method	City of Calabasas.
Potential Source(s) of Pollutant	Runoff from natural and urban sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to a greater than 10% exceedance of nitrate as nitrogen water quality objectives.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season, storm events, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: McGrath Beach Beach Closures

Water Body	McGrath Beach
Stressor/Media/Beneficial Use	Beach Closures/Water/REC- 1
Data quality assessment. Extent to which data quality requirements met.	Ventura County Environmental Health Division QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Beach Closures can be linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Beach Closures and Postings are poor measures of whether water quality standards are exceeded, because in many circumstances postings and closures are precautionary measures.
Water Body-specific Information	Data 2 to 3 years old.
Data used to assess water quality	No Beach Closures recorded in the last three years.
Spatial representation	Unknown.
Temporal representation	Unknown.
Data type	Unknown.
Use of standard method	Standard approaches were used.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Other water body- or site-specific information including the age of the data were considered. <p>All of the water quality measurements did not exceed the beach closure guidelines in the last three years. Staff confidence that standards are not exceeded is moderate.</p>

Region 4: McGrath Lake PCBs

Water Body	McGrath Lake
Stressor/Media/Beneficial Use	PCBs/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP and DFG
Linkage between measurement endpoint and beneficial use or standard	Sediment toxicity and ERM-PEL are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 4-9 years old, environmental data measured at site/waterbody.
Data used to assess water quality	13 sediment samples, 7 samples exceeding. Sediment toxicity was observed associated with these chemistry measurements.
Spatial representation	Samples were collected spatially.
Temporal representation	4 different events in 4 different years
Data type	Numerical data.
Use of standard method	BPTCP methods.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff/aerial deposition from agriculture fields.
Alternative Enforceable Program	The Consolidated Toxic Hot Spots Cleanup Plan describes how the RWQCB will work with the McGrath State Beach Area Trustee Council to address cleanup of this site. While the planning has progressed, no remediation of the site has occurred. No responsible parties have been identified.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses are applicable and apply to this water body. 4. The evaluation guideline used to interpret narrative water quality standards is adequate. 5. Data are numerical. 6. Standard methods were used. <p>An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: McGrath Lake

Benthic Community Degradation

Water Body	McGrath Lake
Stressor/Media/Beneficial Use	Benthic Community Degradation/Sediment/Aquatic life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	A pollutant was not identified. Benthic community degradation is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Benthic community impacts are applicable to Aquatic Life.
Water Body-specific Information	Samples taken at site. Data 4 years old.
Data used to assess water quality	Benthic community impacts were identified as a pollutant rather than a condition of the water body. Pollutants such as PCBs and dieldrin that are recommended for listing cause or contribute to the observed benthic impacts.
Spatial representation	Unknown.
Temporal representation	Samples from one year.
Data type	Numerical data.
Use of standard method	BPTCP methods.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff and aerial deposition from urban and agricultural areas.
Alternative Enforceable Program	
RWQCB Recommendation	List due to benthic community degradation.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because the identified parameter is a condition for a water body and not a pollutant.

Region 4: McGrath Lake

Dieldrin

Water Body	McGrath Lake
Stressor/Media/Beneficial Use	Dieldrin/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP and DFG.
Linkage between measurement endpoint and beneficial use or standard	Benthic community effects, sediment toxicity, and ERM-PEL is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 4-9 years old, environmental data measured at site/waterbody.
Data used to assess water quality	13 sediment samples, 10 samples exceeding. Sediment toxicity was observed.
Spatial representation	Samples were collected spatially.
Temporal representation	4 different events in 4 different years.
Data type	Numerical data.
Use of standard method	BPTCP methods.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff/aerial deposition from agriculture fields.
Alternative Enforceable Program	The Consolidated Toxic Hot Spots Cleanup Plan describes how the RWQCB will work with the McGrath State Beach Area Trustee Council to address cleanup of this site. While the planning has progressed, no remediation of the site has occurred. No responsible parties have been identified.
RWQCB Recommendation	List due to exceedances of ERM/PELs.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses are applicable and apply to this water body. 4. The evaluation guideline used to interpret narrative water quality standards is adequate. 5. Data are numerical. 6. Standard methods were used.

Region 4: McGrath Lake Dieldrin

An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 4: McGrath Lake

Fecal Coliform

Water Body	McGrath Lake
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Ventura Division of Environmental Health Services.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data 0.5 - 3 years old, samples measured from site.
Data used to assess water quality	29 bacteria samples, 6 sample exceeding the geometric mean of 200/100 mL. Included in the 29 bacteria samples, 16 samples were collected in collected in the Spring of 2002. Five of the sixteen samples exceeded the 400 MPN/100 mL objective.
Spatial representation	5 sites.
Temporal representation	Spring, Summer, and Fall 1999-2000.
Data type	Numerical data.
Use of standard method	Ventura Division of Environmental Health Services.
Potential Source(s) of Pollutant	Agriculture, landfill runoff and natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: McGrath Lake

Total Pesticides

Water Body	McGrath Lake
Stressor/Media/Beneficial Use	Total Pesticides/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff/aerial deposition from agriculture fields.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because individual chemical can be listed for exceedances of ERM-PELs.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because chemicals can be listed individually.

Region 4: Ormond Beach - Arnold Road

Bacterial Indicators

Water Body	Ormond Beach - Arnold Road
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to Bacterial Indicator water quality standard and are applicable to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	84 samples, 2 samples exceeding.
Spatial representation	1 station: VC(44000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	None.
RWQCB Recommendation	Do not list.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: Ormond Beach - J Street drain (50 yards south of drain)

Bacterial Indicators

Water Body	Ormond Beach - J Street drain (50 yards south of drain)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department.
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards which are applicable to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	99 samples, 13 samples exceeding.
Spatial representation	1 station: VC(42000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 8. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Ormond Beach - Oxnard Industrial drain (50 yards north of d + Bacterial Indicators

Water Body	Ormond Beach - Oxnard Industrial drain (50 yards north of drain)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards and are applicable to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	96 samples, 18 samples exceeding.
Spatial representation	1 station: VC(43000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Peck Road Park Lake

Trash

Water Body	Peck Road Park Lake
Stressor/Media/Beneficial Use	Trash/Water/Aquatic Life, REC-2
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	TMDL Completed.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region 4: Peninsula Beach (Beach area within two rock jetties)

Bacterial Indicators

Water Body	Peninsula Beach (Beach area within two rock jetties)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department.
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	102 samples, 19 samples exceeding.
Spatial representation	1 station: VC(23000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	None.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Piru Creek (Tributary to Santa Clara River Reach 4)

pH

Water Body	Piru Creek (Tributary to Santa Clara River Reach 4)
Stressor/Media/Beneficial Use	pH/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	United Water Conservation District.
Linkage between measurement endpoint and beneficial use or standard	pH WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data 2-5 years old, samples collected at site.
Data used to assess water quality	24 water samples, 4 samples exceeding.
Spatial representation	Samples representative of the Reach.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	United Water Conservation District.
Potential Source(s) of Pollutant	Nonpoint sources and Conservation Discharge Releases.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body information including the effects of natural sources, season and age of the data were considered. <p>An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is low.</p>

Region 4: Pole Creek (tributary to Santa Clara River R3)

Sulfate

Water Body	Pole Creek (tributary to Santa Clara River R3)
Stressor/Media/Beneficial Use	Sulfate/Water/Agriculture
Data quality assessment. Extent to which data quality requirements met.	United Water Conservation District
Linkage between measurement endpoint and beneficial use or standard	Sulfate WQO is linked to Agriculture.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Agriculture.
Water Body-specific Information	Data 2-5 years old, samples collected at site.
Data used to assess water quality	12 water samples, 11 sample exceeding.
Spatial representation	Limited.
Temporal representation	Less than quarterly sampling.
Data type	Numerical data.
Use of standard method	United Water Conservation District
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedance in WQO.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited limited spatial and sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Pole Creek (tributary to Santa Clara River R3)

TDS

Water Body	Pole Creek (tributary to Santa Clara River R3)
Stressor/Media/Beneficial Use	TDS/Water/Agriculture
Data quality assessment. Extent to which data quality requirements met.	United Water Conservation District
Linkage between measurement endpoint and beneficial use or standard	TDS WQO is linked to Agriculture.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Agriculture.
Water Body-specific Information	Data 2-5 years old, samples collected at site.
Data used to assess water quality	12 water samples, 11 sample exceeding.
Spatial representation	Limited.
Temporal representation	Less than quarterly sampling.
Data type	Numerical data.
Use of standard method	United Water Conservation District.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances in WQO.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited limited spatial and sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Port Hueneme Harbor (back basins)

TBT

Water Body	Port Hueneme Harbor (back basins)
Stressor/Media/Beneficial Use	TBT/Tissue and Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP and Army Corp of Engineers
Linkage between measurement endpoint and beneficial use or standard	Sediment chemistry linked to Aquatic Life, however linkage of tissue is unknown.
Utility of measure for judging if standards or uses are not attained	Tissue guidelines do not exist for assessment for TBT.
Water Body-specific Information	Data 1- 6 years old, collected at site, one sample event.
Data used to assess water quality	14 sediment samples in 1996, 20 sediment samples in 2001. Data on the number of samples exceeding was not presented.
Spatial representation	Samples were collected spatially.
Temporal representation	2 years of sampling.
Data type	Numerical data.
Use of standard method	BPTCP and US Army Corps of Engineer methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because guideline for TBT in tissue do not exist and delist TBT in sediment because levels were low.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because there was not a foundation for listing. The tissue measurements could not be evaluated. Assessment guidelines for TBT do not exist. A TBT level in sediment were low.

Region 4: Port Hueneme Harbor (back basins)

PAHs

Water Body	Port Hueneme Harbor (back basins)
Stressor/Media/Beneficial Use	PAHs/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP and Army Corp of Engineers
Linkage between measurement endpoint and beneficial use or standard	Sediment chemistry is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Measurement based on Army Corp of Engineers, PAH were at a low levels.
Water Body-specific Information	Data 1- 6 years old, collected at site, one sample event.
Data used to assess water quality	14 sediment samples in 1996, 20 sediment samples in 2001, 0 samples exceeding.
Spatial representation	Samples were collected spatially.
Temporal representation	2 years of sampling.
Data type	Numerical.
Use of standard method	BPTCP method, US Army Corps of Engineers unknown.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because PAHs appear to be low throughout most of the back basin area based on Army Corps of Engineers data.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including the age of the data was considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: Port Hueneme Harbor (back basins)

Zinc

Water Body	Port Hueneme Harbor (back basins)
Stressor/Media/Beneficial Use	Zinc/Tissue and Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP and Army Corp of Engineer
Linkage between measurement endpoint and beneficial use or standard	Sediment chemistry linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Tissue guidelines do not exist for assessment for zinc.
Water Body-specific Information	Data 1 - 6 years old, collected at site, one sample event.
Data used to assess water quality	14 sediment samples in 1996, 20 sediment samples in 2001, 0 samples exceeding.
Spatial representation	Samples were collected spatially.
Temporal representation	2 years of sampling.
Data type	Numerical data.
Use of standard method	BPTCP and US Army Corps of Engineers methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because guideline for zinc in tissue do not exist and delist zinc in sediment because levels were low.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because there was not a foundation for listing. The tissue measurements could not be evaluated. Assessment guidelines for zinc in tissue do not exist. Also zinc levels in sediment were low.

Region 4: Promenade Park - Figueroa Street

Bacterial Indicators

Water Body	Promenade Park - Figueroa Street
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards which are applicable to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	97 samples, 11 samples exceeding.
Spatial representation	1 station: VC(14000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 4: Promenade Park - Holiday Inn (south of drain at California + Bacterial Indicators

Water Body	Promenade Park - Holiday Inn (south of drain at California Street)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards, which are applicable to Aquatic Life.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	105 samples, 19 samples exceeding.
Spatial representation	1 station: VC(17000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Promenade Park - Oak Street

Bacterial Indicators

Water Body	Promenade Park - Oak Street
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department.
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards, which are applicable to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	99 samples, 14 samples exceeding.
Spatial representation	1 station: VC(16000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 8. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Promenade Park - Redwood Apartments

Bacterial Indicators

Water Body	Promenade Park - Redwood Apartments
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standard, which are applicable to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	94 samples, 14 samples exceeding.
Spatial representation	1 station: VC(15000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 8. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Rincon Beach (150 yards south of creek mouth)

Bacterial Indicators

Water Body	Rincon Beach (150 yards south of creek mouth)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards, which are linked to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	104 samples, 23 samples exceeding.
Spatial representation	1 station: VC(1050). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 8. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Rincon Beach (at end of footpath)

Bacterial Indicators

Water Body	Rincon Beach (at end of footpath)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards, which are linked to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	101 samples, 15 samples exceeding.
Spatial representation	1 station: VC(1100). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 8. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Rincon Beach-50 yards south of creek mouth

Bacterial Indicators

Water Body	Rincon Beach-50 yards south of creek mouth
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards, which are linked to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	107 samples, 26 samples exceeding.
Spatial representation	1 station: VC(1000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 8. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Rio de Santa Clara/Oxnard Drain #3

Chem A

Water Body	Rio de Santa Clara/Oxnard Drain #3
Stressor/Media/Beneficial Use	Chem A/Tissue/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	Chem A MTRLs are linked to Fish Consumption..
Utility of measure for judging if standards or uses are not attained	MTRLs are applicable to Fish Consumption.
Water Body-specific Information	No data was presented.
Data used to assess water quality	No data was presented.
Spatial representation	No data was presented.
Temporal representation	No data was presented.
Data type	Unknown
Use of standard method	No data was presented.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, storm water runoff and aerial deposition from agricultural fields.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because listing was based on NAS guidelines, which are outdated. Individual chemicals can be listing for exceedances in MTRLs as appropriate.
SWRCB Staff Recommendation	After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should not be removed from the section 303(d) list because the NAS guidelines are not outdated and remain a valid assessment tools. This guideline should continue to be used until an alternative value is available.

Region 4: Rio Hondo Reach 1

Ammonia

Water Body	Rio Hondo Reach 1
Stressor/Media/Beneficial Use	Ammonia/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	There was not new data assessed for this water body-pollution combination.
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	No new data were submitted that indicates that water quality standards are met.
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Point sources
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this reach.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. It is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants is much lower than downstream concentrations (up to an order of magnitude difference).</p>
RWQCB Recommendation	None.

Region 4: Rio Hondo Reach 1

Ammonia

SWRCB Staff Recommendation

After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: Rio Hondo Reach 2

Ammonia

Water Body	Rio Hondo Reach 2
Stressor/Media/Beneficial Use	Ammonia/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	There was not new data assessed for this water body-pollution combination.
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	No new data were submitted that indicates that water quality standards are met.
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Point sources
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this reach.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. It is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants is much lower than downstream concentrations (up to an order of magnitude difference).</p>
RWQCB Recommendation	None.

Region 4: Rio Hondo Reach 2

Ammonia

SWRCB Staff Recommendation

After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: San Antonio Creek (Tributary to Ventura River Reach 4)

Total Nitrogen

Water Body	San Antonio Creek (Tributary to Ventura River Reach 4)
Stressor/Media/Beneficial Use	Total nitrogen/Water/WQO
Data quality assessment. Extent to which data quality requirements met.	Ojai Valley Wastewater Treatment Plant.
Linkage between measurement endpoint and beneficial use or standard	Total Nitrogen WQO is applicable.
Utility of measure for judging if standards or uses are not attained	Exceedance of Basin Plan WQO of 5 mg/L for Nitrogen is applicable.
Water Body-specific Information	Data is 2-6 year old, data measured in the waterbody, samples collected different in seasons and years.
Data used to assess water quality	23 water samples, 4 samples exceeding.
Spatial representation	2 sites.
Temporal representation	Winter 1998 - Summer 2000.
Data type	Numerical data.
Use of standard method	Ojai Valley Wastewater Treatment Plant
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to greater than 10% exceedance of the nitrogen objective.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: San Buenaventura Beach (Kalorama Street and Sanjon testing + Bacterial Indicators)

Water Body	San Buenaventura Beach (Kalorama Street and Sanjon testing sites)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department.
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards, which are linked to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	101 samples, 14 samples exceeding.
Spatial representation	1 station: VC(18000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: San Buenaventura Beach (south of drain at Dover Lane)

Bacterial Indicators

Water Body	San Buenaventura Beach (south of drain at Dover Lane)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards, which are linked to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	100 samples, 8 samples exceeding.
Spatial representation	1 station: VC(20000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: San Buenaventura Beach (south of drain at San Jon Road)

Bacterial Indicators

Water Body	San Buenaventura Beach (south of drain at San Jon Road)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards, which are linked to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	103 samples, 20 samples exceeding.
Spatial representation	1 station: VC(19000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 8. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: San Buenaventura Beach (south of drain at Weymouth Lane)

Bacterial Indicators

Water Body	San Buenaventura Beach (south of drain at Weymouth Lane)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards, which are linked to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	97 samples, 2 samples exceeding.
Spatial representation	1 station: VC(20000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: San Gabriel River East Fork

Trash

Water Body	San Gabriel River East Fork
Stressor/Media/Beneficial Use	Trash/Water/Aquatic Life, REC-2
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	TMDL Completed.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region 4: San Gabriel River Estuary

Arsenic

Water Body	San Gabriel River Estuary
Stressor/Media/Beneficial Use	Arsenic/Tissue/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	QAPP
Linkage between measurement endpoint and beneficial use or standard	Arsenic MTRLs are linked to Fish Consumption.
Utility of measure for judging if standards or uses are not attained	MTRLs guidelines for arsenic do not exist.
Water Body-specific Information	N/A
Data used to assess water quality	Not applicable
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	Delist because there is no longer a MTRL for arsenic.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because MTRL for arsenic in tissue do not exist.

Region 4: San Gabriel River Estuary

Trash

Water Body	San Gabriel River Estuary						
Stressor/Media/Beneficial Use	Trash/Water/REC-1, REC-2 and Aquatic Life						
Data quality assessment. Extent to which data quality requirements met.	Quality assurance information was not provided.						
Linkage between measurement endpoint and beneficial use or standard	Trash is linked to Aquatic Life and REC-2.						
Utility of measure for judging if standards or uses are not attained	Photographs can indicate gross impacts on beneficial uses and whether standards have been exceeded. Measurements of the amounts of trash can provide a relative measure of the potential for nuisance.						
Water Body-specific Information	Photographs of conditions in the estuary were provided. Data on beach and riverbed debris removal were also submitted.						
Data used to assess water quality	<p>Photographic evidence of the accumulation of trash was provided in the vicinity of the confluence of Coyote Creek with the San Gabriel River Estuary. Nineteen photographs were submitted depicting locations along the River and Estuary. The trash included plastic bottles, styrofoam cups, paper wrappers, wood debris, shopping carts, shoes, and other unidentifiable debris.</p> <table><tr><td colspan="2">Summary of Beach Debris Removal</td></tr><tr><td>January-December 2001</td><td>572.43 tons</td></tr><tr><td>January-June 2002</td><td>16 tons</td></tr></table>	Summary of Beach Debris Removal		January-December 2001	572.43 tons	January-June 2002	16 tons
Summary of Beach Debris Removal							
January-December 2001	572.43 tons						
January-June 2002	16 tons						
Spatial representation	Photographs were taken at two locations. Beach cleanup was conducted at Seal Beach and in the riverbed. It is unknown what percentage of the cleanup volume is from the riverbed.						
Temporal representation	Photographs taken on three dates: 10/29/2000, 11/04/2000, and 11/05/2000. Monthly volunteer trash removal was performed between January 2001 and June 2002.						
Data type	Numerical and Non-numerical data.						
Use of standard method	Unknown.						
Potential Source(s) of Pollutant	Probably storm water discharge.						
Alternative Enforceable Program	The storm water permit could address this problem but likely does not have the enforceable provisions to do so now.						
RWQCB Recommendation	List because of non-attainment of the narrative objective for floating and settleable materials objective described in the Basin Plan.						
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p>						

Region 4: San Gabriel River Estuary

Trash

1. The data is considered to be of unknown quality.
2. The data exhibited insufficient spatial and temporal coverage.

An inadequate amount of the measurements exceeded the water quality standard. The staff confidence that standards were exceeded is low.

Region 4: San Gabriel River Estuary

Ammonia as Nitrogen

Water Body	San Gabriel River Estuary
Stressor/Media/Beneficial Use	Ammonia as Nitrogen/Water/Aquatic Life
Data quality assessment, Extent to which data quality requirements met.	Los Angeles County Sanitation District as part of the receiving water monitoring program for the San Jose Creek Water Reclamation Plant.
Linkage between measurement endpoint and beneficial use or standard	Ammonia CTR and WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR and WQO are applicable Aquatic Life.
Water Body-specific Information	Data 2-3 years old, data measure from site, samples taken different seasons and years.
Data used to assess water quality	117 water samples, 34 exceeding samples.
Spatial representation	3 sites.
Temporal representation	Summer 1997, fall 1998, spring 2000.
Data type	Numerical data.
Use of standard method	Los Angeles County Sanitation District as part of the receiving water monitoring program for the San Jose Creek Water Reclamation plan.
Potential Source(s) of Pollutant	Point sources.
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this reach.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. It is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants is much lower than downstream concentrations (up to an order of</p>

Region 4: San Gabriel River Estuary

Ammonia as Nitrogen

RWQCB Recommendation

magnitude difference).

List due to non attainment of the ammonia aquatic life chronic criteria.

SWRCB Staff Recommendation

After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: San Gabriel River Reach 1

Ammonia

Water Body	San Gabriel River Reach 1
Stressor/Media/Beneficial Use	Ammonia/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	New data was not assessed for this water body-pollution combination.
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	No new data were submitted that indicates that water quality standards are met.
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Point sources.
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this reach.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. It is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants is much lower than downstream concentrations (up to an order of magnitude difference).</p>
RWQCB Recommendation	None.

Region 4: San Gabriel River Reach 1

Ammonia

SWRCB Staff Recommendation

After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: San Gabriel River Reach 1

Toxicity

Water Body	San Gabriel River Reach 1
Stressor/Media/Beneficial Use	Toxicity/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data submitted in the 2000 NPDES Annual Monitoring Reports of the Long Beach and Valencia Water Reclamation Plants.
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Receiving water stations downstream of the Long Beach WRP on Coyote Creek in 1999-2000.
Data used to assess water quality	Chronic toxicity has been detected at receiving water stations downstream of the Long Beach WRP on Coyote Creek in 1999-2000 and downstream of the Valencia WRP on the Santa Clara River during 2000. Toxicity identification evaluations have been performed using zeolite filtration to control ammonia toxicity. The test results indicated ammonia was likely the principal cause of toxicity.
Spatial representation	Receiving water stations downstream of the Long Beach WRP on Coyote Creek and downstream of the Valencia WRP on the Santa Clara River.
Temporal representation	Toxicity identification evaluation completed: 1999-2000.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Point sources.
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this reach. If ammonia concentrations are reduced it is very likely that the observed toxicity will be removed as well.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs.</p>

Region 4: San Gabriel River Reach 1

Toxicity

RWQCB Recommendation

None.

SWRCB Staff Recommendation

After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: San Gabriel River Reach 2

Ammonia

Water Body	San Gabriel River Reach 2
Stressor/Media/Beneficial Use	Ammonia/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	New data was not assessed for this water body-pollution combination.
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	No new data were submitted that indicates that water quality standards are met.
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Point sources.
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this reach.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. It is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants is much lower than downstream concentrations (up to an order of magnitude difference).</p>
RWQCB Recommendation	None.

Region 4: San Gabriel River Reach 2
Ammonia

SWRCB Staff Recommendation

After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: San Gabriel River Reach 3

Toxicity

Water Body	San Gabriel River Reach 3
Stressor/Media/Beneficial Use	Toxicity/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data submitted in the 2000 NPDES Annual Monitoring Reports of the Long Beach and Valencia Water Reclamation Plants.
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Receiving water stations downstream of the Long Beach WRP on Coyote Creek in 1999-2000.
Data used to assess water quality	Chronic toxicity has been detected at receiving water stations downstream of the Long Beach WRP on Coyote Creek in 1999-2000 and downstream of the Valencia WRP on the Santa Clara River during 2000. Toxicity identification evaluations have been performed using zeolite filtration to control ammonia toxicity. The test results indicated ammonia was likely the principal cause of toxicity.
Spatial representation	Receiving water stations downstream of the Long Beach WRP on Coyote Creek and downstream of the Valencia WRP on the Santa Clara River.
Temporal representation	Toxicity identification evaluation completed: 1999-2000.
Data type	Numerical data
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Point sources.
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this reach. If ammonia concentrations are reduced it is very likely that the observed toxicity will be removed as well.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs.</p>

Region 4: San Gabriel River Reach 3

Toxicity

RWQCB Recommendation

None.

SWRCB Staff Recommendation

After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: San Gabriel River, Reach 2

Dissolved Zinc

Water Body	San Gabriel River, Reach 2
Stressor/Media/Beneficial Use	Dissolved Zinc/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Stormwater Monitoring Program
Linkage between measurement endpoint and beneficial use or standard	Dissolved Zinc CTR is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR is applicable to Aquatic Life.
Water Body-specific Information	Data 2-5 years old, data measured in waterbody, sample taken different seasons and years.
Data used to assess water quality	26 water samples, 4 samples exceeding.
Spatial representation	One site.
Temporal representation	Fall, winter, and spring (1997-2000).
Data type	Numerical data.
Use of standard method	Stormwater Monitoring Program
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to a greater than 10% exceedance of dissolved zinc recommended water criteria for protection of fresh water aquatic life.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: San Gabriel River, Reach 2

Dissolved Copper

Water Body	San Gabriel River, Reach 2
Stressor/Media/Beneficial Use	Dissolved Copper/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Stormwater Monitoring Program
Linkage between measurement endpoint and beneficial use or standard	Dissolved Copper CTR is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR is applicable to Aquatic Life.
Water Body-specific Information	Data 2-5 years old, data measured in waterbody, sample taken different seasons and years.
Data used to assess water quality	26 water samples, 7 samples exceeding.
Spatial representation	1 site (S 14).
Temporal representation	Fall, winter, spring (1997-2000).
Data type	Numerical data.
Use of standard method	Stormwater Monitoring Program.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances of the dissolved chronic criterion.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: San Jose Creek Reach 1 (SG Confluence to Temple St.)

Ammonia

Water Body	San Jose Creek Reach 1 (SG Confluence to Temple St.)
Stressor/Media/Beneficial Use	Ammonia/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	New data was not assessed for this water body-pollution combination.
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	New data was not submitted that indicates that water quality standards are met.
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Point sources
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this Reach.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. It is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants is much lower than downstream concentrations (up to an order of magnitude difference).</p>
RWQCB Recommendation	None.

Region 4: San Jose Creek Reach 1 (SG Confluence to Temple St.)
Ammonia

SWRCB Staff Recommendation

After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: San Jose Creek Reach 2 (Temple St. to I 10 at White Ave.)

Ammonia

Water Body	San Jose Creek Reach 2 (Temple St. to I 10 at White Ave.)
Stressor/Media/Beneficial Use	Ammonia/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	New data was not assessed for this water body-pollution combination.
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	New data was not submitted that indicates that water quality standards are met.
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Point sources
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this Reach.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. It is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants is much lower than downstream concentrations (up to an order of magnitude difference).</p>
RWQCB Recommendation	None.

Region 4: San Jose Creek Reach 2 (Temple St. to I 10 at White Ave.)

Ammonia

SWRCB Staff Recommendation

After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: San Jose Creek, Reach 1 (SG Confluence to Temple St.) and R + pH

Water Body	San Jose Creek, Reach 1 (SG Confluence to Temple St.) and Reach 2 (Temple St. to I 10 at White Ave.)
Stressor/Media/Beneficial Use	pH/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	San Jose Creek Reclamation Facility
Linkage between measurement endpoint and beneficial use or standard	pH WQO is linked to Aquatic Life. The Basin Plan states: pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges. Ambient pH levels shall not be changed more than 0.5 units from natural conditions as a result of waste discharge.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data 1-5 years old, data measure in waterbody, samples taken in different years in summer and fall.
Data used to assess water quality	474 water samples, 180 samples exceeding. However, stations downstream of the WWRP are in compliance with the Basin Plan water quality objective. Therefore, it does not appear that the elevated pH levels are a result of waste discharge. There is no storm water or nonpoint source monitoring data available.
Spatial representation	Upstream of San Jose Creek and nonpoint source discharge from urban runoff.
Temporal representation	Throughout 7/1997 and 9/2000.
Data type	Numerical data.
Use of standard method	San Jose Creek Reclamation Facility.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to pH exceedance above 8.5.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be excluded from the list because the linkage between the pH level and waste discharge cannot be determined.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. There is no linkage between exceedance in pH values and waste discharge.

Region 4: San Jose Creek, Reach 1 (SG Confluence to Temple St.) and R + pH

Compliance with the water quality standard cannot be determined because there are not data showing the elevated pH levels are a result of waste discharge. Staff confidence that standards were exceeded is low.

Region 4: Santa Clara River Estuary

Chem A

Water Body	Santa Clara River Estuary
Stressor/Media/Beneficial Use	Chem A/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP and TSMP
Linkage between measurement endpoint and beneficial use or standard	Chem A NAS guidelines are linked to Aquatic Life .
Utility of measure for judging if standards or uses are not attained	NAS guidelines are applicable to Aquatic Life.
Water Body-specific Information	Data was not presented.
Data used to assess water quality	Data was not presented.
Spatial representation	Data was not presented.
Temporal representation	Data was not presented.
Data type	Data was not presented.
Use of standard method	TSMP and BPTCP methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	Originally recommended for delisting because listing was based on NAS outdated guidelines. Reevaluation resulted in a recommendation to maintain on list because Chem A group are not outdated and are still valid guidelines set by NAS to protect aquatic life.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should not be removed from the section 303(d) list because applicable guidelines are not outdated and there is no new information to support delisting.

Region 4: Santa Clara River Estuary Beach-Surfer's Knoll (area of Bea + Bacterial Indicators

Water Body	Santa Clara River Estuary Beach-Surfer's Knoll (area of Beach adjacent to parking lot)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards, which is linked to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	95 samples, 7 samples exceeding.
Spatial representation	1 station: VC(25000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 4: Santa Clara River Estuary Beach/Surfer's Knoll

Fecal Coliform

Water Body	Santa Clara River Estuary Beach/Surfer's Knoll
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Ventura Division of Environmental Health Services
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform Ocean Plan standard is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan WQO is applicable to REC-1.
Water Body-specific Information	Data 2-4 years old, samples collected at site, collected during all seasons.
Data used to assess water quality	102 fecal coliform bacteria samples, 0% samples exceeding in 400 MPN/100 ml.
Spatial representation	2 sites.
Temporal representation	Fall, winter, spring, summer, fall (1987-2000).
Data type	Numerical data.
Use of standard method	Ventura Division of Environmental Health Services methods.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because Ocean Plan WQO for fecal coliform was met.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. The Ocean Plan total coliform objective of samples exceeding 1000 MPN/100ml is met. 7. Standard methods were used. 8. Other water body specific information including the effects of season and age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: Santa Clara River Estuary Beach/Surfer's Knoll

Total Coliform

Water Body	Santa Clara River Estuary Beach/Surfer's Knoll
Stressor/Media/Beneficial Use	Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Ventura Division of Environmental Health Services
Linkage between measurement endpoint and beneficial use or standard	Total Coliform Ocean Plan standard is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data 2-4 years old, samples collected at site, collected during all seasons.
Data used to assess water quality	102 total coliform bacteria samples, 5 samples exceeding 1000 MPN/100mL.
Spatial representation	2 sites.
Temporal representation	Fall, winter, spring, summer, fall (1987-2000).
Data type	Numerical data.
Use of standard method	Ventura Division of Environmental Health Services methods.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because Ocean Plan standard for total coliform was met.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. The Ocean Plan total coliform objective of samples exceeding 1000 MPN/100ml is met. 6. Standard methods were used. 7. Other water body specific information including the effects of season and age of the data were considered. <p>An inadequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: Santa Clara River Reach 3

Nitrite as Nitrogen

Water Body	Santa Clara River Reach 3
Stressor/Media/Beneficial Use	Nitrite as Nitrogen/Water/Agriculture and Groundwater Recharge
Data quality assessment. Extent to which data quality requirements met.	POTW and United Water Conservation District, Department of Water Resources
Linkage between measurement endpoint and beneficial use or standard	Nitrite as Nitrogen WQO is linked to Agriculture and Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to Agriculture and Groundwater Recharge.
Water Body-specific Information	Data 2-5 years old, samples collected at site.
Data used to assess water quality	70 water samples, 5 samples exceeding.
Spatial representation	Samples are representative of Reach.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	POTW and United Water Conservation District, Department of Water Resources methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List. However reevaluation of data including non detected values at 1/2 the minimum detection level did not exceed Basin Plan Water Quality Objectives for nitrite as nitrogen.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used are applicable.5. Data are numerical and calculations including non detected values at 1/2 of the minimum detection level were included in the data evaluation.6. Standard methods were used.7. Other water body information including the effects of season and age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standards. Staff confidence that standards were not exceeded is moderate.</p>

Region 4: Santa Clara River Reach 3

Total Dissolved Solids

Water Body	Santa Clara River Reach 3
Stressor/Media/Beneficial Use	Total Dissolved Solids/Water/Groundwater Recharge and Agriculture
Data quality assessment. Extent to which data quality requirements met.	POTW, United Water Conservation District, Department of Water Resources
Linkage between measurement endpoint and beneficial use or standard	Basin Plan WQO linked to Agriculture and Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	Basin Plan WQO exceedances are applicable.
Water Body-specific Information	Data 2-5 years old, samples collected at site.
Data used to assess water quality	189 water samples, 38 sample exceeding.
Spatial representation	Samples representative of Reach.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	POTW, United Water Conservation District, Department of Water Resources methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other site-specific information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Santa Clara River Reach 3

Nitrite and Nitrate as Nitrogen

Water Body	Santa Clara River Reach 3
Stressor/Media/Beneficial Use	Nitrite and Nitrate as Nitrogen/Water/Agriculture and Groundwater Recharge
Data quality assessment. Extent to which data quality requirements met.	POTW and United Water Conservation District, Department of Water Resources
Linkage between measurement endpoint and beneficial use or standard	Nitrite and Nitrate as Nitrogen WQO linked to Agriculture and Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	WQOs are applicable to Agriculture and Groundwater Recharge.
Water Body-specific Information	Data 2-5 years old, samples collected at site.
Data used to assess water quality	53 water samples, 5 samples exceeding.
Spatial representation	Samples are representative of Reach.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	POTW and United Water Conservation District, Department of Water Resources methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List. Reevaluation of data including non detected values at 1/2 the minimum detection level still exceeded Basin Plan Water Quality Objectives for nitrate and nitrite as nitrogen.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used are applicable. 5. Data are numerical and calculations including non- detected values at 1/2 of the minimum detection level exceeded water quality objectives. 6. Standard methods were used. 7. Other water body information including the effects of season, storm events, and age of the data were considered.

Region 4: Santa Clara River Reach 3

Nitrite and Nitrate as Nitrogen

An inadequate number of the water quality measurements exceeded the water quality standards. Staff confidence that standards were exceeded is low.

Region 4: Santa Clara River Reach 7

Ammonia

Water Body	Santa Clara River Reach 7
Stressor/Media/Beneficial Use	Ammonia/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	New data was not assessed for this water body-pollution combination.
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	New data was not submitted that indicates that water quality standards are met.
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Point sources.
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this Reach.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. It is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants is much lower than downstream concentrations (up to an order of magnitude difference).</p>
RWQCB Recommendation	None.

Region 4: Santa Clara River Reach 7

Ammonia

SWRCB Staff Recommendation

After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: Santa Clara River Reach 8

Organic Enrichment-Low Dissolved

Water Body	Santa Clara River Reach 8
Stressor/Media/Beneficial Use	Organic Enrichment-Low Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	<p>Dissolved Oxygen: Collection of data under quality assurance related to NPDES monitoring and RWQCB monitoring related to development of the nitrogen TMDL.</p> <p>Algae data from two sources: Quality assurance for the first dataset performed by scientists from UC Los Angeles; unknown quality assurance associated with data collected by citizen monitoring effort.</p>
Linkage between measurement endpoint and beneficial use or standard	<p>Organic Enrichment-Low Dissolved WQO is linked to Aquatic Life.</p> <p>The RWQCB used the percentage of cover of algae as a surrogate for organic enrichment. No measurements of total organic carbon, dissolved organic carbon, etc. were available. Algae growth can be a result of increased nutrients or decreased cover. Algae measurements by themselves are poor indicators of organic enrichment, because many factors influence algae growth.</p>
Utility of measure for judging if standards or uses are not attained	<p>Organic Enrichment-Low Dissolved WQO is applicable to Aquatic Life. Algae percent cover may or may not be related to organic enrichment.</p>
Water Body-specific Information	Data is up to three years old.
Data used to assess water quality	<p>Dissolved oxygen: 144 samples, 2 samples exceeding.</p> <p>The original listing in 1996 was based on measurements ranging from 4.2 mg/L to 10.8 mg/L (with a mean of 7.4 mg/L).</p> <p>Algae data: 10 observations of floating algae with two of the observations exceeding the threshold (the same threshold used for Malibu Creek).</p>
Spatial representation	Dissolved Oxygen: One site. Algae data: 2 sampling locations (the length of the sampling locations is approximately one mile).
Temporal representation	<p>Dissolved oxygen: All samples taken between 9 a.m. and 2 p.m. Samples collected monthly during 1999 and 2001.</p> <p>Algae data: Sampling was completed in Summer and Fall.</p>
Data type	Numerical data.
Use of standard method	Dissolved Oxygen: NPDES methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list due to poor data distribution.

Region 4: Santa Clara River Reach 8

Organic Enrichment-Low Dissolved

SWRCB Staff Recommendation

After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list and place on the Monitoring List because applicable water quality standards are not exceeded and the lack of QA/QC.

This conclusion is based on the staff findings that:

1. The dissolved oxygen data is considered to be of adequate quality.
2. The data exhibited insufficient temporal coverage.
3. Beneficial uses apply to the water body.
4. Other water body- or site-specific information including the effects of age of the data were considered.

An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate. More information is needed because the available data may underestimate standards non-attainment.

Region 4: Santa Clara River Reach 8

Nitrate-nitrogen plus Nitrite-nitrogen

Water Body	Santa Clara River Reach 8
Stressor/Media/Beneficial Use	Nitrate-nitrogen plus Nitrite-nitrogen/Water/Ground Water Recharge (assuming that groundwater would be used as drinking water)
Data quality assessment. Extent to which data quality requirements met.	Collection of data under quality assurance related to NPDES monitoring and RWQCB monitoring related to development of the nitrogen TMDL.
Linkage between measurement endpoint and beneficial use or standard	Nitrate-nitrogen plus Nitrite-nitrogen WQO are linked to Ground Water Recharge.
Utility of measure for judging if standards or uses are not attained	WQOs are applicable to Ground Water Recharge.
Water Body-specific Information	Data is up to five years old.
Data used to assess water quality	44 samples, 1 sample exceeding.
Spatial representation	Three locations were sampled downstream of a point source.
Temporal representation	Data were collected quarterly from 1997 to 2002.
Data type	Numerical data.
Use of standard method	NPDES monitoring and RWQCB sampling used to support the Nitrogen TMDL.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	There is sufficient information to indicate that the nitrification/de-nitrification process being installed at the Saugus WRP will address nitrite problem for this reach.
RWQCB Recommendation	Delist.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements did not exceed the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: Santa Clara River Reach 8

Nitrite-Nitrogen

Water Body	Santa Clara River Reach 8
Stressor/Media/Beneficial Use	Nitrite-Nitrogen/Water/Ground Water Recharge (assuming that groundwater would be used as drinking water)
Data quality assessment. Extent to which data quality requirements met.	NPDES monitoring and RWQCB staff monitoring related to TMDL development.
Linkage between measurement endpoint and beneficial use or standard	Nitrogen water quality objectives are established in the Los Angeles Region Basin Plan for a number of reaches of the Santa Clara River.
Utility of measure for judging if standards or uses are not attained	Measurements of nitrite-nitrogen can be compared to the numeric Basin Plan water quality objective.
Water Body-specific Information	Age of the data is up to five years.
Data used to assess water quality	36 total measurements of nitrite-nitrogen. 15 samples exceed the water quality objective for nitrite-nitrogen. There is sufficient information to indicate that the nitrification/de-nitrification process will address nitrite problem.
Spatial representation	Two sampling stations.
Temporal representation	Data were collected quarterly from 1997 through 2002.
Data type	Numerical data.
Use of standard method	NPDES monitoring.
Potential Source(s) of Pollutant	Point sources, non-point sources, groundwater.
Alternative Enforceable Program	<p>The Saugus Water Reclamation Plant, which discharges at the upstream end of the reach, is in the process of installing nitrification and denitrification (NDN) treatment processes to meet effluent limits in the plant's NPDES permit for ammonia and nitrate plus nitrite.</p> <p>The permit establishes a compliance date of June 12, 2003 to meet receiving water limits for ammonia. The permittee has stated and shown that the NDN facilities will be operational at the Saugus plant by the June, 2003 deadline. The contract has been awarded (nearly \$10 million) to construct the NDN processes.</p> <p>When the NDN facilities are operational the nitrite concentrations will be reduced drastically. Operation of a research NDN facility at the Whittier narrows WRP has shown that NDN will reduce nitrite levels well below the 1 mg/L nitrite water quality objective.</p> <p>The Saugus WRP is the principal (if not sole) source of nitrite in Reach 8. A measurement upstream of the treatment plant had a very low concentration of nitrite (well below the standard). Other measurements down stream show varying levels of nitrite depending on possible plant uptake, conversion of nitrite to other more stable forms of nitrogen, and</p>

Region 4: Santa Clara River Reach 8

Nitrite-Nitrogen

	dilution.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program List because applicable water quality standards are exceeded but there is a program in place now that will address the problem in 2003.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Santa Clara River Reach 8

Ammonia

Water Body	Santa Clara River Reach 8
Stressor/Media/Beneficial Use	Ammonia/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	New data was not assessed for this water body-pollution combination.
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	New data was not submitted that indicates that water quality standards are met.
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Point sources
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this Reach.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. It is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants is much lower than downstream concentrations (up to an order of magnitude difference).</p>
RWQCB Recommendation	None.

Region 4: Santa Clara River Reach 8

Ammonia

SWRCB Staff Recommendation

After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: Santa Monica Bay Offshore/Nearshore Copper

Water Body	Santa Monica Bay Offshore/Nearshore												
Stressor/Media/Beneficial Use	Copper/Sediment/Marine Habitat Copper/Fish Tissue/Commercial and Sport Fishing												
Data quality assessment. Extent to which data quality requirements met.	High quality for sediment data (See QAPP for SCBPP and Bight '98). High quality fish tissue data (See QAPP for Hyperion permit).												
Linkage between measurement endpoint and beneficial use or standard	Habitat quality is related to pollutant concentration (no toxics in toxic amounts). Fish tissue data can be compared to risk-based values for the protection of human health (no toxics in toxic amounts). Linkages between fish tissue data and uses associated with the protection of fish and wildlife are weak.												
Utility of measure for judging if standards or uses are not attained	Use of sediment guidelines from literature alone is somewhat controversial. However, use of sediment triad (chemistry, benthos, and acute toxicity) in a weight of evidence approach is well established. Fish tissue data provides an additional screen in overall weight of evidence approach.												
Water Body-specific Information	Regional surveys conducted in 1994 and 1998. Rig-fishing in Santa Monica Bay collected by Hyperion (1995-2000).												
Data used to assess water quality	<p>Sediment contaminant concentration, benthic community structure, whole-sediment toxicity tests, fish muscle tissue data. Copper are concentrations low relative to thresholds.</p> <table><tr><td></td><td>1994 (n=55)</td><td>1998 (n=23)</td></tr><tr><td>% of Area >ER-L (34 mg/kg)</td><td>44%</td><td>13%</td></tr><tr><td>% of Area >ER-M (270 mg/kg)</td><td>0%</td><td>0%</td></tr><tr><td>Average concentration</td><td>30 mg/kg</td><td>12 mg/kg</td></tr></table> <p>There is no evidence of acute toxicity in sediments in 1994 (n = 55) or 1998 (n = 23).</p> <p>Benthic community structure assessed as good in 98% to 100% of area in 1994 and 1998 using the Benthic Response Index.</p> <p>Copper concentrations in fish muscle tissue from approximately 250 samples collected in Santa Monica Bay were below US Fish and Wildlife (1998) screening value of 15 mg/kg ww.</p>		1994 (n=55)	1998 (n=23)	% of Area >ER-L (34 mg/kg)	44%	13%	% of Area >ER-M (270 mg/kg)	0%	0%	Average concentration	30 mg/kg	12 mg/kg
	1994 (n=55)	1998 (n=23)											
% of Area >ER-L (34 mg/kg)	44%	13%											
% of Area >ER-M (270 mg/kg)	0%	0%											
Average concentration	30 mg/kg	12 mg/kg											
Spatial representation	Regional surveys entire bay. Point Dume to Palos Verdes Shelf (55 samples in 1994 and 23 samples in 1998). Rig-fishing sites (9) representative of offshore conditions in the Bay.												
Temporal representation	2 years data from Regional Survey. 5 years data on fish tissue.												
Data type	Numerical data.												
Use of standard method	Performance-based.												

Region 4: Santa Monica Bay Offshore/Nearshore Copper

Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. The evaluation guideline used to interpret narrative water quality standards is adequate.4. Data are numerical.5. Standard methods were used.6. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.</p>

Region 4: Santa Monica Bay Offshore/Nearshore Arsenic

Water Body	Santa Monica Bay Offshore/Nearshore
Stressor/Media/Beneficial Use	Arsenic/Sediment/Marine Habitat Arsenic/Fish Tissue/Commercial and Sport Fishing
Data quality assessment. Extent to which data quality requirements met.	High quality for sediment data (See QAPP for SCBPP and Bight '98). High quality fish tissue data (See QAPP for Hyperion permit).
Linkage between measurement endpoint and beneficial use or standard	Habitat quality is related to pollutant concentration (No toxics in toxic amounts). Fish tissue data can be compared to risk-based numbers for the protection of human health (No toxics in toxic amounts). Linkages between fish tissue data and uses associated with the protection of fish and wildlife are weak.
Utility of measure for judging if standards or uses are not attained	Use of sediment guidelines from literature alone is somewhat controversial. However, use of sediment triad (chemistry, benthos, and acute toxicity) in a weight of evidence approach is well established. Fish tissue data provides an additional screen in overall weight of evidence approach.
Water Body-specific Information	Regional surveys conducted in 1994 and 1998. Rig-fishing in Santa Monica Bay collected by Hyperion (1995-2000).
Data used to assess water quality	Arsenic concentrations fish muscle tissue concentrations in approximately 250 samples were low relative to human-health based screening values of 1.0 mg/kg ww for organic arsenic (OEHHA, 1999). These comparisons were made assuming that organic arsenic comprises 10% of the total arsenic measured in fish tissue.
Spatial representation	Regional surveys entire bay. Point Dume to Palos Verdes Shelf (55 samples in 1994 and 23 samples in 1998). Rig-fishing sites (9) representative of offshore conditions in the Bay.
Temporal representation	2 years data from Regional Survey. 5 years data on fish tissue.
Data type	Numerical data.
Use of standard method	Performance-based.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.

Region 4: Santa Monica Bay Offshore/Nearshore

Arsenic

2. The data exhibited sufficient spatial and temporal coverage.
3. The evaluation guideline used to interpret narrative water quality standards is adequate.
4. Data are numerical.
5. Standard methods were used.
6. Other water body- or site-specific information including the effects of age of the data were considered.

Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.

Region 4: Santa Monica Bay Offshore/Nearshore

Cadmium

Water Body	Santa Monica Bay Offshore/Nearshore												
Stressor/Media/Beneficial Use	Cadmium/Sediment/Marine Habitat Cadmium/Fish Tissue/Commercial and Sport Fishing												
Data quality assessment. Extent to which data quality requirements met.	High quality for sediment data (See QAPP for SCBPP and Bight '98). High quality for fish tissue data (See QAPP for Hyperion permit).												
Linkage between measurement endpoint and beneficial use or standard	Habitat quality is related to pollutant concentration (no toxics in toxic amounts). Fish tissue data can be compared to risk-based numbers for the protection of human health (no toxics in toxic amounts). Linkages between fish tissue data and uses associated with the protection of fish and wildlife are weak.												
Utility of measure for judging if standards or uses are not attained	Use of sediment guidelines from literature alone is somewhat controversial. However, use of sediment triad (chemistry, benthos, and acute toxicity) in a weight of evidence approach is well established. Fish tissue data provides an additional screen in overall weight of evidence approach.												
Water Body-specific Information	Regional surveys conducted in 1994 and 1998. Rig-fishing in Santa Monica Bay collected by Hyperion (1995-2000).												
Data used to assess water quality	Sediment contaminant concentration, benthic community structure, whole-sediment toxicity tests, fish muscle tissue data. Cadmium concentrations low relative to thresholds. <table><tr><td></td><td>1994 (n=55)</td><td>1998 (n=23)</td></tr><tr><td>% of Area >ER-L (1.2 mg/kg)</td><td>9%</td><td>17%</td></tr><tr><td>% of Area >ER-M (9.6 mg/kg)</td><td>0%</td><td>0%</td></tr><tr><td>Average concentration</td><td>0.66 mg/kg</td><td>0.72 mg/kg</td></tr></table> <p>There is no evidence of acute toxicity in sediments in 1994 (n = 55) or 1998 (n = 23).</p> <p>Benthic community structure assessed as good in 98% to 100% of area in 1994 and 1998 using the Benthic Response Index.</p> <p>Cadmium concentrations fish muscle tissue from approximately 250 fish samples were low relative to human-health based screening value of 3.0 mg/kg ww (OEHHA, 1998).</p>		1994 (n=55)	1998 (n=23)	% of Area >ER-L (1.2 mg/kg)	9%	17%	% of Area >ER-M (9.6 mg/kg)	0%	0%	Average concentration	0.66 mg/kg	0.72 mg/kg
	1994 (n=55)	1998 (n=23)											
% of Area >ER-L (1.2 mg/kg)	9%	17%											
% of Area >ER-M (9.6 mg/kg)	0%	0%											
Average concentration	0.66 mg/kg	0.72 mg/kg											
Spatial representation	Regional surveys entire bay. Point Dume to Palos Verdes Shelf (55 samples in 1994 and 23 samples in 1998). Rig-fishing sites (9) representative of offshore conditions in the Bay.												
Temporal representation	2 years data from Regional Survey. 5 years data on fish tissue.												
Data type	Numerical data.												
Use of standard method	Performance-based.												

Region 4: Santa Monica Bay Offshore/Nearshore Cadmium

Potential Source(s) of Pollutant	Point and non-point sources.
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. The evaluation guideline used to interpret narrative water quality standards is adequate.4. Data are numerical.5. Standard methods were used.6. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.</p>

Region 4: Santa Monica Bay Offshore/Nearshore

Chromium

Water Body	Santa Monica Bay Offshore/Nearshore												
Stressor/Media/Beneficial Use	Chromium/Sediment/Marine Habitat Chromium/Tissue/Commercial and Sport Fishing												
Data quality assessment. Extent to which data quality requirements met.	High quality for sediment data (See QAPP for SCBPP and Bight '98). High quality fish tissue data (See QAPP for Hyperion permit).												
Linkage between measurement endpoint and beneficial use or standard	Habitat quality is related to pollutant concentration (no toxics in toxic amounts). Fish tissue data can be compared to risk based numbers for the protection of human health (no toxics in toxic amounts). Linkages between fish tissue data and uses associated with the protection of fish and wildlife are weak.												
Utility of measure for judging if standards or uses are not attained	Use of sediment guidelines from literature alone is somewhat controversial. However, use of sediment triad (chemistry, benthos, and acute toxicity) in a weight of evidence approach is well established. Fish tissue data provides an additional screen in overall weight of evidence approach.												
Water Body-specific Information	Regional surveys conducted in 1994 and 1998. Rig-fishing in Santa Monica Bay collected by Hyperion (1995-2000).												
Data used to assess water quality	<p>Sediment contaminant concentration, benthic community structure, whole-sediment toxicity tests, fish muscle tissue data. Chromium concentrations are low relative to sediment thresholds.</p> <table><tr><td></td><td>1994 (n=55)</td><td>1998 (n=23)</td></tr><tr><td>% of Area >ER-L (1.0 mg/kg)</td><td>45%</td><td>4%</td></tr><tr><td>% of Area >ER-M (3.7 mg/kg)</td><td>0%</td><td>0%</td></tr><tr><td>Average concentration</td><td>85 mg/kg</td><td>45 mg/kg</td></tr></table> <p>There is no evidence of acute toxicity in sediments in 1994 (n = 55) or 1998 (n = 23).</p> <p>Benthic community structure assessed as good in 98% to 100% of area in 1994 and 1998 using the Benthic Response Index.</p> <p>Chromium concentrations in fish muscle tissue from approximately 250 samples were low relative to MTRL of 1.0 mg/kg ww for total chromium.</p>		1994 (n=55)	1998 (n=23)	% of Area >ER-L (1.0 mg/kg)	45%	4%	% of Area >ER-M (3.7 mg/kg)	0%	0%	Average concentration	85 mg/kg	45 mg/kg
	1994 (n=55)	1998 (n=23)											
% of Area >ER-L (1.0 mg/kg)	45%	4%											
% of Area >ER-M (3.7 mg/kg)	0%	0%											
Average concentration	85 mg/kg	45 mg/kg											
Spatial representation	Regional surveys entire bay. Point Dume to Palos Verdes Shelf (55 samples in 1994 and 23 samples in 1998). Rig-fishing sites (9) representative of offshore conditions in the Bay.												
Temporal representation	2 years data from Regional Survey. 5 years data on fish tissue.												
Data type	Numerical data.												
Use of standard method	Performance-based.												
Potential Source(s) of Pollutant	Point and non-point sources.												

Region 4: Santa Monica Bay Offshore/Nearshore Chromium

Alternative Enforceable Program

N/A

RWQCB Recommendation

None.

SWRCB Staff Recommendation

After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be not be placed on the section 303(d) list because applicable water quality standards are not exceeded.

This conclusion is based on the staff findings that:

1. The data is considered to be of adequate quality.
2. The data exhibited sufficient spatial and temporal coverage.
3. The evaluation guideline used to interpret narrative water quality standards is adequate.
4. Data are numerical.
5. Standard methods were used.
6. Other water body- or site-specific information including the effects of age of the data were considered.

Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.

Region 4: Santa Monica Bay Offshore/Nearshore

Lead

Water Body	Santa Monica Bay Offshore/Nearshore												
Stressor/Media/Beneficial Use	Lead/Sediment/Marine Habitat Lead/Tissue/Commercial and Sport Fishing												
Data quality assessment. Extent to which data quality requirements met.	High quality for sediment data (See QAPP for SCBPP and Bight '98). High quality fish tissue data (See QAPP for Hyperion permit).												
Linkage between measurement endpoint and beneficial use or standard	Habitat quality is related to pollutant concentration (no toxics in toxic amounts). Fish tissue data can be compared to risk based numbers for the protection of human health (no toxics in toxic amounts). Linkages between fish tissue data and uses associated with the protection of fish and wildlife are weak.												
Utility of measure for judging if standards or uses are not attained	Use of sediment guidelines from literature alone is somewhat controversial. However, use of sediment triad (chemistry, benthos, and acute toxicity) in a weight of evidence approach is well established. Fish tissue data provides an additional screen in overall weight of evidence approach.												
Water Body-specific Information	Regional surveys conducted in 1994 and 1998. Rig-fishing in Santa Monica Bay collected by Hyperion (1995-2000).												
Data used to assess water quality	<p>Sediment contaminant concentration, benthic community structure, whole-sediment toxicity tests, fish muscle tissue data. Lead are concentrations low relative to thresholds.</p> <table><tr><td></td><td>1994 (n=55)</td><td>1998 (n=23)</td></tr><tr><td>% of Area >ER-L (81 mg/kg)</td><td>7%</td><td>22%</td></tr><tr><td>% of Area >ER-M (370 mg/kg)</td><td>0%</td><td>0%</td></tr><tr><td>Average concentration</td><td>22 mg/kg</td><td>40 mg/kg</td></tr></table> <p>There is no evidence of acute toxicity in sediments in 1994 (n = 55) or 1998 (n = 23).</p> <p>Benthic community structure assessed as good in 98% to 100% of area in 1994 and 1998 using the Benthic Response Index.</p> <p>Lead concentrations in fish muscle tissue concentrations from approximately 250 samples were low relative to MTRL of 2.0 mg/kg ww.</p> <p>There is no lead-based consumption advisory for commercial or sport fishing in fish from Santa Monica Bay (OEHHA, 2001).</p>		1994 (n=55)	1998 (n=23)	% of Area >ER-L (81 mg/kg)	7%	22%	% of Area >ER-M (370 mg/kg)	0%	0%	Average concentration	22 mg/kg	40 mg/kg
	1994 (n=55)	1998 (n=23)											
% of Area >ER-L (81 mg/kg)	7%	22%											
% of Area >ER-M (370 mg/kg)	0%	0%											
Average concentration	22 mg/kg	40 mg/kg											
Spatial representation	Regional surveys entire bay. Point Dume to Palos Verdes Shelf (55 samples in 1994 and 23 samples in 1998). Rig-fishing sites (9) representative of offshore conditions in the Bay.												
Temporal representation	2 years data from Regional Survey. 5 years data on fish tissue.												
Data type	Numerical data.												

Region 4: Santa Monica Bay Offshore/Nearshore Lead

Use of standard method	Performance based.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. The evaluation guideline used to interpret narrative water quality standards is adequate.4. Data are numerical.5. Standard methods were used.6. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.</p>

Region 4: Santa Monica Bay Offshore/Nearshore

Zinc

Water Body	Santa Monica Bay Offshore/Nearshore												
Stressor/Media/Beneficial Use	Zinc/Sediment/Marine Habitat Zinc/Fish Tissue/Commercial and Sport Fishing												
Data quality assessment. Extent to which data quality requirements met.	High quality for sediment data (See QAPP for SCBPP and Bight '98). High quality fish tissue data (See QAPP for Hyperion permit).												
Linkage between measurement endpoint and beneficial use or standard	Habitat quality is related to pollutant concentration (no toxics in toxic amounts). Fish tissue data can be compared to risk based numbers for the protection of human health (no toxics in toxic amounts). Linkages between fish tissue data and uses associated with the protection of fish and wildlife are weak.												
Utility of measure for judging if standards or uses are not attained	Use of sediment guidelines from literature alone is somewhat controversial. However, use of sediment triad (chemistry, benthos, and acute toxicity) in a weight of evidence approach is well established. Fish tissue data provides an additional screen in overall weight of evidence approach. Linkages between fish tissue data and uses associated with the protection of fish and wildlife are weak.												
Water Body-specific Information	Regional surveys conducted in 1994 and 1998. Rig-fishing in Santa Monica Bay collected by Hyperion (1995-2000).												
Data used to assess water quality	Sediment contaminant concentration, benthic community structure, whole-sediment toxicity tests, fish muscle tissue data. Zinc concentrations are low relative to thresholds. <table><tr><td></td><td>1994 (n=55)</td><td>1998 (n=23)</td></tr><tr><td>% of Area >ER-L (150 mg/kg)</td><td>7%</td><td>0%</td></tr><tr><td>% of Area >ER-M (410 mg/kg)</td><td>0%</td><td>0%</td></tr><tr><td>Average concentration</td><td>84 mg/kg</td><td>61 mg/kg</td></tr></table> <p>There is no evidence of acute toxicity in sediments in 1994 (n = 55) or 1998 (n = 23).</p> <p>Benthic community structure assessed as good in 98% to 100% of area in 1994 and 1998 using the Benthic Response Index.</p> <p>Zinc concentrations in fish muscle tissue from approximately 250 samples were low relative to the Mean International Standard for freshwater fish of 45 mg/kg ww (United Nations, 1983).</p>		1994 (n=55)	1998 (n=23)	% of Area >ER-L (150 mg/kg)	7%	0%	% of Area >ER-M (410 mg/kg)	0%	0%	Average concentration	84 mg/kg	61 mg/kg
	1994 (n=55)	1998 (n=23)											
% of Area >ER-L (150 mg/kg)	7%	0%											
% of Area >ER-M (410 mg/kg)	0%	0%											
Average concentration	84 mg/kg	61 mg/kg											
Spatial representation	Regional surveys entire bay. Point Dume to Palos Verdes Shelf (55 samples in 1994 and 23 samples in 1998). Rig-fishing sites (9) representative of offshore conditions in the Bay.												
Temporal representation	2 years data from Regional Survey. 5 years data on fish tissue.												
Data type	Numerical data.												
Use of standard method	Performance-based.												

Region 4: Santa Monica Bay Offshore/Nearshore

Zinc

Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. The evaluation guideline used to interpret narrative water quality standards is adequate.4. Data are numerical.5. Standard methods were used.6. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.</p>

Region 4: Santa Monica Bay Offshore/Nearshore Silver

Water Body	Santa Monica Bay Offshore/Nearshore												
Stressor/Media/Beneficial Use	Silver/Sediment/Marine Habitat Silver/Tissue/Commercial and Sport Fishing												
Data quality assessment. Extent to which data quality requirements met.	High quality for sediment data (See QAPP for SCBPP and Bight '98). High quality fish tissue data (See QAPP for Hyperion permit).												
Linkage between measurement endpoint and beneficial use or standard	Habitat quality is related to pollutant concentration (no toxics in toxic amounts). Fish tissue data can be compared to risk based numbers for the protection of human health (no toxics in toxic amounts). Linkages between fish tissue data and uses associated with the protection of fish and wildlife are weak.												
Utility of measure for judging if standards or uses are not attained	Use of sediment guidelines from literature alone is somewhat controversial. However, use of sediment triad (chemistry, benthos, and acute toxicity) in a weight of evidence approach is well established. Fish tissue data provides an additional screen in overall weight of evidence approach.												
Water Body-specific Information	Regional surveys conducted in 1994 and 1998. Rig-fishing in Santa Monica Bay collected by Hyperion (1995-2000).												
Data used to assess water quality	<p>Sediment contaminant concentration, benthic community structure, whole-sediment toxicity tests, fish muscle tissue data. Silver concentrations are slightly elevated relative to sediment thresholds. The majority of these elevated values are within the zone of influence of the Hyperion outfall.</p> <table><tr><td></td><td>1994 (n=55)</td><td>1998 (n=23)</td></tr><tr><td>% of Area >ER-L (1.0 mg/kg)</td><td>71%</td><td>65%</td></tr><tr><td>% of Area >ER-M (3.7 mg/kg)</td><td>13%</td><td>26%</td></tr><tr><td>Average concentration</td><td>1.58 mg/kg</td><td>2.06 mg/kg</td></tr></table> <p>There is no evidence of acute toxicity in sediments in 1994 (n = 55) or 1998 (n = 23).</p> <p>Benthic community structure good in 98% of area.</p> <p>There are no human-health based or wildlife based screening values for evaluating silver concentrations in fish tissue. There is no silver-based consumption advisory for commercial or sport fishing in fish from Santa Monica Bay (OEHHA, 2001).</p>		1994 (n=55)	1998 (n=23)	% of Area >ER-L (1.0 mg/kg)	71%	65%	% of Area >ER-M (3.7 mg/kg)	13%	26%	Average concentration	1.58 mg/kg	2.06 mg/kg
	1994 (n=55)	1998 (n=23)											
% of Area >ER-L (1.0 mg/kg)	71%	65%											
% of Area >ER-M (3.7 mg/kg)	13%	26%											
Average concentration	1.58 mg/kg	2.06 mg/kg											
Spatial representation	Regional surveys entire bay. Point Dume to PV Shelf (55 samples in 1994 and 23 samples in 1998). Rig-fishing sites (9) representative of offshore conditions in the Bay.												
Temporal representation	2 years data from Regional Survey. 5 years data on fish tissue.												
Data type	Numerical data.												
Use of standard method	Performance-based.												

Region 4: Santa Monica Bay Offshore/Nearshore Silver

Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. The evaluation guideline used to interpret narrative water quality standards is adequate.4. Data are numerical.5. Standard methods were used.6. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.</p>

Region 4: Santa Monica Bay Offshore/Nearshore Nickel

Water Body	Santa Monica Bay Offshore/Nearshore												
Stressor/Media/Beneficial Use	Nickel/Sediment/Marine Habitat Nickel/Fish Tissue/Commercial and Sport Fishing												
Data quality assessment. Extent to which data quality requirements met.	High quality for sediment data (See QAPP for SCBPP and Bight '98). High quality fish tissue data (See QAPP for Hyperion permit).												
Linkage between measurement endpoint and beneficial use or standard	Habitat quality is related to pollutant concentration (no toxics in toxic amounts). Fish tissue data can be compared to risk based numbers for the protection of human health (no toxics in toxic amounts). Linkages between fish tissue data and uses associated with the protection of fish and wildlife are weak.												
Utility of measure for judging if standards or uses are not attained	Use of sediment guidelines from literature alone is somewhat controversial. However, use of sediment triad (chemistry, benthos, and acute toxicity) in a weight of evidence approach is well established. Fish tissue data provides an additional screen in overall weight of evidence approach.												
Water Body-specific Information	Regional surveys conducted in 1994 and 1998. Rig-fishing in Santa Monica Bay collected by Hyperion (1995-2000).												
Data used to assess water quality	<p>Sediment contaminant concentration, benthic community structure, whole-sediment toxicity tests, fish muscle tissue data. Nickel concentrations are low relative to thresholds.</p> <table><tr><td></td><td>1994 (n=55)</td><td>1998 (n=23)</td></tr><tr><td>% of Area >ER-L (21 mg/kg)</td><td>40%</td><td>30%</td></tr><tr><td>% of Area >ER-M (52 mg/kg)</td><td>2%</td><td>0%</td></tr><tr><td>Average concentration</td><td>24 mg/kg</td><td>20 mg/kg</td></tr></table> <p>There is no evidence of acute toxicity in sediments in 1994 (n = 55) or 1998 (n = 23).</p> <p>Benthic community structure assessed as good in 98% to 100% of area in 1994 and 1998 using the Benthic Response Index.</p> <p>There are no human-health based or wildlife based screening values for evaluating nickel concentrations in fish tissue.</p>		1994 (n=55)	1998 (n=23)	% of Area >ER-L (21 mg/kg)	40%	30%	% of Area >ER-M (52 mg/kg)	2%	0%	Average concentration	24 mg/kg	20 mg/kg
	1994 (n=55)	1998 (n=23)											
% of Area >ER-L (21 mg/kg)	40%	30%											
% of Area >ER-M (52 mg/kg)	2%	0%											
Average concentration	24 mg/kg	20 mg/kg											
Spatial representation	Regional surveys entire bay. Point Dume to Palos Verdes Shelf (55 samples in 1994 and 23 samples in 1998). Rig-fishing sites (9) representative of offshore conditions in the Bay.												
Temporal representation	2 years data from Regional Survey. 5 years data on fish tissue.												
Data type	Numerical data.												
Use of standard method	Performance based.												
Potential Source(s) of Pollutant	Point and nonpoint sources.												

Region 4: Santa Monica Bay Offshore/Nearshore Nickel

Alternative Enforceable Program

N/A

RWQCB Recommendation

None.

SWRCB Staff Recommendation

After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.

This conclusion is based on the staff findings that:

1. The data is considered to be of adequate quality.
2. The data exhibited sufficient spatial and temporal coverage.
3. The evaluation guideline used to interpret narrative water quality standards is adequate.
4. Data are numerical.
5. Standard methods were used.
6. Other water body- or site-specific information including the effects of age of the data were considered.

Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.

Region 4: Santa Monica Bay Offshore/Nearshore

Mercury

Water Body	Santa Monica Bay Offshore/Nearshore												
Stressor/Media/Beneficial Use	Mercury/Sediment/Marine Habitat Mercury/Fish Tissue/Commercial and Sport Fishing												
Data quality assessment. Extent to which data quality requirements met.	High quality for sediment data (See QAPP for SCBPP and Bight '98). High quality fish tissue data (See QAPP for Hyperion permit).												
Linkage between measurement endpoint and beneficial use or standard	Habitat quality is related to pollutant concentration (no toxics in toxic amounts). Fish tissue data can be compared to risk based numbers for the protection of human health (no toxics in toxic amounts). Linkages between fish tissue data and uses associated with the protection of fish and wildlife are weak.												
Utility of measure for judging if standards or uses are not attained	Use of sediment guidelines from literature alone is somewhat controversial. However, use of sediment triad (chemistry, benthos, and acute toxicity) in a weight of evidence approach is well established. Fish tissue data provides an additional screen in overall weight of evidence approach.												
Water Body-specific Information	Regional surveys conducted in 1994 and 1998. Rig-fishing in Santa Monica Bay collected by Hyperion (1995-2000).												
Data used to assess water quality	Sediment contaminant concentration, benthic community structure, whole-sediment toxicity tests, fish muscle tissue data. Mercury concentrations are low relative to thresholds. <table><tr><td></td><td>1994 (n = 55)</td><td>1998 (n=23)</td></tr><tr><td>% of Area >ER-L (0.15 mg/kg)</td><td>45%</td><td>48%</td></tr><tr><td>% of Area >ER-M (0.71 mg/kg)</td><td>0%</td><td>0%</td></tr><tr><td>Average concentration</td><td>0.14 mg/kg</td><td>0.16mg/kg</td></tr></table> <p>There is no evidence of acute toxicity in sediments in 1994 (n = 55) or 1998 (n = 23).</p> <p>Benthic community structure assessed as good in 98% to 100% of area in 1994 and 1998 using the Benthic Response Index.</p> <p>The average mercury concentrations in fish muscle tissue from approximately 250 samples collected in Santa Monica Bay were close to the human-health based screening values (OEHHA, 0.3 mg/kg ww). There is no mercury-based consumption advisory for commercial or sport fishing in fish from Santa Monica Bay (OEHHA, 2001).</p>		1994 (n = 55)	1998 (n=23)	% of Area >ER-L (0.15 mg/kg)	45%	48%	% of Area >ER-M (0.71 mg/kg)	0%	0%	Average concentration	0.14 mg/kg	0.16mg/kg
	1994 (n = 55)	1998 (n=23)											
% of Area >ER-L (0.15 mg/kg)	45%	48%											
% of Area >ER-M (0.71 mg/kg)	0%	0%											
Average concentration	0.14 mg/kg	0.16mg/kg											
Spatial representation	Regional surveys entire bay. Point Dume to Palos Verdes Shelf (55 samples in 1994 and 23 samples in 1998). Rig-fishing sites (9) representative of offshore conditions in the Bay.												
Temporal representation	2 years data from Regional Survey. 5 years data on fish tissue.												
Data type	Numerical data.												

Region 4: Santa Monica Bay Offshore/Nearshore Mercury

Use of standard method	Performance-based.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. The evaluation guideline used to interpret narrative water quality standards is adequate.4. Data are numerical.5. Standard methods were used.6. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.</p>

Region 4: Seaside Wilderness Park (400 yards N. of Ventura River)

Bacterial Indicators

Water Body	Seaside Wilderness Park (400 yards N. of Ventura River)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department.
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to Bacterial Indicator water quality standards which are linked to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	82 samples, 2 samples exceeding.
Spatial representation	1 station: VC(12000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: Sespe Creek (tributary to Santa Clara River Reach 3)

pH

Water Body	Sespe Creek (tributary to Santa Clara River Reach 3)
Stressor/Media/Beneficial Use	pH/Water/Aquatic Life and Agriculture
Data quality assessment. Extent to which data quality requirements met.	POTW and United Water Conservation District
Linkage between measurement endpoint and beneficial use or standard	pH WQO linked to Agriculture and Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Agriculture and Aquatic Life.
Water Body-specific Information	Data 2 - 5 years old, sample measured from site.
Data used to assess water quality	24 water samples, 6 sample exceeding.
Spatial representation	Samples representative of Reach.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	POTW and United Water Conservation District method.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Sespe Creek (tributary to Santa Clara River Reach 3) Chloride

Water Body	Sespe Creek (tributary to Santa Clara River Reach 3)
Stressor/Media/Beneficial Use	Chloride/Water/Aquatic Life and Agriculture
Data quality assessment. Extent to which data quality requirements met.	United Water Conservation District
Linkage between measurement endpoint and beneficial use or standard	Chloride WQO is linked to Agriculture and Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Agriculture and Aquatic Life.
Water Body-specific Information	Data 2 - 5 years old, sampled measured from site.
Data used to assess water quality	16 water samples, 6 sample exceeding.
Spatial representation	Samples are representative of Reach.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	United Water Conservation District
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.6. Data are numerical.6. Standard methods were used.7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Surfer's Point at Seaside (End of access path via wooden gate + Bacterial Indicators)

Water Body	Surfer's Point at Seaside (End of access path via wooden gate)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards, which is linked to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	20 samples exceeding standards out of 105 samples.
Spatial representation	1 station: VC(13000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Ventura River Estuary

Total Coliform

Water Body	Ventura River Estuary
Stressor/Media/Beneficial Use	Total Coliform/Water/REC-1 and Shellfish Harvesting
Data quality assessment. Extent to which data quality requirements met.	Ojai Valley River Volunteer Monitoring Program
Linkage between measurement endpoint and beneficial use or standard	Ocean Plan standards are linked to REC-1 and Shellfish Harvesting.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1 and Shellfish Harvesting.
Water Body-specific Information	Data is 2-4 year old, data measured in the waterbody, samples collected different in seasons and years.
Data used to assess water quality	37 bacteria samples, Total Coliform (8 exceeding at 1000/100) (14 exceeding at 230/100ml and 37 exceeding at 70/100ml).
Spatial representation	1 site.
Temporal representation	Different seasons and years.
Data type	Numerical data.
Use of standard method	Ojai Valley River Volunteer Monitoring Program.
Potential Source(s) of Pollutant	Stables and horse property.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedance in Ocean Plan WQO.
SWRCB Staff Recommendation	<p>After reviewing of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Ventura River Estuary

DDT

Water Body	Ventura River Estuary
Stressor/Media/Beneficial Use	DDT/Tissue/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	TSMP and BPTCP
Linkage between measurement endpoint and beneficial use or standard	DDT MTRLs are linked to Fish Consumption.
Utility of measure for judging if standards or uses are not attained	MTRLs are applicable to Fish Consumption.
Water Body-specific Information	Data 10 years old, data measured from site, species present, one time sample.
Data used to assess water quality	1 tissue sample (Original listing appears to have been based on DDT concentrations found in shiner surf perch in 1993 (TSM); however, the level of 23 ppb of p,p'-DDE is below MTRL-which equals 32.0 ppb)..
Spatial representation	1 tissue sample.
Temporal representation	One time sample event.
Data type	Numerical data.
Use of standard method	TSMP, BPTCP and NPDES methods.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded. In addition the original listing was based on one sample and concentrations of DDE was below the MTRLs.

Region 4: Ventura River Estuary

Fecal Coliform

Water Body	Ventura River Estuary
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1 and Shellfish Harvesting
Data quality assessment. Extent to which data quality requirements met.	Ojai Valley River Volunteer Monitoring Program
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1 and Shellfish Harvesting.
Utility of measure for judging if standards or uses are not attained	WQO are applicable REC-1 and Shellfish Harvesting.
Water Body-specific Information	Data is 2-4 years old, data measured in the waterbody, samples collected different in seasons and years.
Data used to assess water quality	37 bacteria samples, 6 samples exceeding 400 MPN/100ml objective.
Spatial representation	1 site.
Temporal representation	Different seasons and years.
Data type	Numerical data.
Use of standard method	Ojai Valley River Volunteer Monitoring Program.
Potential Source(s) of Pollutant	Stables and horse property.
Alternative Enforceable Program	
RWQCB Recommendation	List due exceedances in Basin Plan WQO.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body information including the effects of season and age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Ventura River Reach 1 (Estuary to Main Street) and R2 (Main + Zinc

Water Body	Ventura River Reach 1 (Estuary to Main Street) and R2 (Main Street to Weldon Canyon)
Stressor/Media/Beneficial Use	Zinc/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Use.
Utility of measure for judging if standards or uses are not attained	EDLs are not an applicable guideline for assessment of beneficial use protection.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Historical use of pesticides.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original Listing was based on EDLs which do not represent valid assessment guidelines.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Ventura River Reach 1 (Estuary to Main Street) and R2 (Main + Silver)

Water Body	Ventura River Reach 1 (Estuary to Main Street) and R2 (Main Street to Weldon Canyon)
Stressor/Media/Beneficial Use	Silver/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not an applicable guideline for assessment of beneficial use protection.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Historical use of pesticides
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original listing was based on EDLs which do not represent valid assessment guidelines.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Ventura River Reach 1 (Estuary to Main Street) and R2 (Main + Selenium

Water Body	Ventura River Reach 1 (Estuary to Main Street) and R2 (Main Street to Weldon Canyon)
Stressor/Media/Beneficial Use	Selenium/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Use.
Utility of measure for judging if standards or uses are not attained	EDLs are not an applicable guideline for assessment of beneficial use protection.
Water Body-specific Information	N/A
Data used to assess water quality	No data presented.
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Historical use of pesticides.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original Listing was based on EDLs which do not represent valid assessment guidelines.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Ventura River Reach 1 (Estuary to Main Street) and R2 (Main + Copper)

Water Body	Ventura River Reach 1 (Estuary to Main Street) and R2 (Main Street to Weldon Canyon)
Stressor/Media/Beneficial Use	Copper/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Use.
Utility of measure for judging if standards or uses are not attained	EDLs are not an applicable guideline for assessment of beneficial use protection.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Historical use of pesticides.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original Listing was based on EDLs which do not represent valid assessment guidelines.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Westlake Lake Chlordane

Water Body	Westlake Lake
Stressor/Media/Beneficial Use	Chlordane/Tissue/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	TSMP QAPP
Linkage between measurement endpoint and beneficial use or standard	Chlordane MTRLs are linked to Fish Consumption.
Utility of measure for judging if standards or uses are not attained	MTRLs are applicable to Fish Consumption.
Water Body-specific Information	Data is 10- 11 years old.
Data used to assess water quality	<p>2 tissue samples, 0 samples exceeding. The tissue samples collected in 1991 and 1992 are below the MTRL guideline for chlordane.</p> <p>This water body-pollutant combination was recommended to be removed from the section 303(d) list by the RWQCB. The SWRCB staff recommended to maintain the listing because the data was not presented to support delisting. In December 2002, the RWQCB included data to support the delisting.</p>
Spatial representation	Unknown.
Temporal representation	Data was collected in 1991 and 1992.
Data type	Numerical.
Use of standard method	TSMP.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original Listing was based on a tissue concentration that now is below the MTRL guideline for Chlordane.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the 303(d) list because applicable water quality standards are below the guideline. The RWQCB provided the appropriate data, that was inadvertently missing in their original fact sheet, to support the delisting of this water body-pollutant combination.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of age of the data were considered.

Region 4: Westlake Lake Chlordane

None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 4: Westlake Lake Copper

Water Body	Westlake Lake
Stressor/Media/Beneficial Use	Copper/Tissue/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	Unknown
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not an applicable guideline for assessment of beneficial use protection.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original listing was based on EDLs which no longer represent valid assessment guidelines.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Wheeler Creek-Todd Barranca

TDS

Water Body	Wheeler Creek-Todd Barranca
Stressor/Media/Beneficial Use	TDS/Water/Agriculture
Data quality assessment. Extent to which data quality requirements met.	United Water Conservation District
Linkage between measurement endpoint and beneficial use or standard	TDS WQO is linked to Agriculture.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Agriculture.
Water Body-specific Information	Data 2-5 years old, samples collected at site.
Data used to assess water quality	12 water samples, 12 sample exceeding.
Spatial representation	Limited.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	United Water Conservation District methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body information including the effects of season and age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Wheeler Creek-Todd Barranca

Sulfate

Water Body	Wheeler Creek-Todd Barranca
Stressor/Media/Beneficial Use	Sulfate/Water/Agriculture
Data quality assessment. Extent to which data quality requirements met.	United Water Conservation District
Linkage between measurement endpoint and beneficial use or standard	Sulfate WQO is linked to Agriculture.
Utility of measure for judging if standards or uses are not attained	WQO is applicable the Agriculture.
Water Body-specific Information	Data 2-5 years old, samples collected at site.
Data used to assess water quality	12 water samples, 11 sample exceeding.
Spatial representation	Limited.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	United Water Conservation District methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Page left blank intentionally.

Reference List for Region 4

Staff Report

California Regional Water Quality Control Board. Los Angeles Region. 2002. Draft Staff Report. 2002 Update: CWA Section 305(b) Report and Section 303(d) List of Impaired Waters. January 29, 2002. And associated Fact Sheets.

Reports and Information

Aquatic Bioassay and Consulting Laboratories. The Marine Environment of Marina del Rey Harbor, Reports to the Department of Beaches and Harbors, County of Los Angeles, July 1995-June 1996; July 1996-June 1997; July 1997-June 1998; July 1998-June 1999.

California Department of Fish and Game. 1998. Sediment Chemistry, Toxicity and Benthic Community Conditions in Selected Water Bodies of the Los Angeles Region, Final Report to California State Water Resources Control Board, Bay Protection and Toxic Cleanup Program, August 1998.

California Department of Fish and Game, Office of Spill Prevention and Response, Water Pollution Control Laboratory. 1998. A Water Quality Inventory Series: Biological and Physical/Habitat Assessment of California Water Bodies, Calleguas Creek Characterization Study, Benthic Macroinvertebrates (November 1998).

California Office of Environmental Health Hazard Assessment. 2001. California Sport Fish Consumption Advisories. June 2001.

California Regional Water Quality Control Board, Los Angeles Region. 2001. Watershed Management Initiative Chapter. (December 2001).

City of Los Angeles, Bureau of Sanitation. 2001. Low-Flow Diversion of Dry-Weather Runoff. Report to City of Los Angeles' Environmental Quality and Waste Management Committee, January 11, 2001.

Federal Register. 2000. Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule (California Toxics Rule). 40 CFR Part 131. May 18, 2000.

Harrington, James M. 2001. Letter from James M. Harrington, California Department of Fish and Game, to Jonathan S. Bishop, Los Angeles Regional Water Quality Control Board, dated December 6, 2001.

Jones, Howard M. Letter with photographs from Howard M. Jones, Trustee, Lena Jones Trust, to Melinda Becker, Los Angeles Regional Water Quality Control Board, dated April 26, 2001.

Larry Walker and Associates. 2000. Calleguas Creek Characterization Study: Results of the Coordinated Water Quality Monitoring Program, Surface Water Element.

Los Angeles County Department of Public Works. 2001. 1994-2000 Stormwater Monitoring Report. (Excerpt).

Long, E.R., L.J. Field and D.D. MacDonald. 1998. Predicting Toxicity in Marine Sediments with Numerical Sediment Quality Guidelines, Environmental Toxicology and Chemistry 17(4): 714-727.

Los Angeles Regional Water Quality Control Board. 1994. Water Quality Control Plan, Los Angeles Region (Basin Plan).

Los Angeles Regional Water Quality Control Board. 1996. 1996 California Water Quality Assessment – 305(b) Report Supporting Documentation for Los Angeles Region.

MacDonald, D.D. 1994. Approach to the Assessment of Sediment Quality in Florida Coastal Waters, Prepared for the Florida Department of Environmental Regulation, MacDonald Environmental Services, Ltd., Ladysmith, British Columbia.

Masoner, Kim. Letter with photographs from Kim Masoner, President, Seal Beach Chamber and Business Association, to Renee DeShazo, Los Angeles Regional Water Quality Control Board, dated May 11, 2001.

MEC Analytical Systems. 1998. Results of Physical, Chemical and Bioassay Testing of Sediments Collected from the Los Angeles River Estuary, Report to US Army Corps of Engineers, Los Angeles District (September 1998).

MEC Analytical Systems. Report of Testing of Sediments Collected from Marina del Rey Harbor, California, Submitted to US Army Corps of Engineers, Los Angeles District, February 1998; February 1999.

State Water Resources Control Board. 1997a. Water Quality Control Plan, Ocean Waters of California (Ocean Plan).

State Water Resources Control Board. 1997b. Toxic Substances Monitoring Program 1994-95 Data Report (October 1997).

State Water Resources Control Board. 2000. State Mussel Watch Program 1995-1997 Data Report (September 2000).

State Water Resources Control Board. 2001a. Memo to Regional Board Executive Officers from Stan Martinson, Chief, Division of Water Quality, regarding "Solicitation of Water Quality Information."

State Water Resources Control Board. 2001b. Letter to Interested Persons from Stan Martinson, Chief, Division of Water Quality, dated March 14, 2001.

US Army Corps of Engineers, Los Angeles District. 1997. Final Environmental Assessment for Los Angeles River Estuary Maintenance Dredging, Long Beach, California (July 1997).

US Army Corps of Engineers, Los Angeles District. 1999. The Port of Hueneme, California, Deep Draft Navigation Feasibility Study, Final Feasibility Report (August 1999).

US Department of Agriculture, Natural Resources Conservation Service. 1995. Calleguas Creek Watershed Erosion and Sediment Control Plan for Mugu Lagoon, Ventura and Los Angeles Counties, California (May 1995).

United States Environmental Protection Agency. 1997. *Guidelines for Preparation of the Comprehensive State Water Quality Assessments (305(b) Reports) and Electronic Updates: Supplement*

External Data By Organization

California Department of Water Resources, Southern District.

Camarillo Sanitary District. Receiving water data.

Casitas Municipal Water District

City of Calabasas. Adopt-A-Creek water quality data.

City of Los Angeles. L.A.-Glendale and Tillman Water Reclamation Plants' receiving water data.

City of San Buenaventura

City of Thousand Oaks. Conejo Creek supplemental data.

City of Thousand Oaks. Hill Canyon and Olsen Road WWRPs' receiving water data.

County of Los Angeles, Department of Public Works. Stormwater monitoring data.

Heal the Bay. Bioassessment and physical habitat assessment data for Malibu Creek watershed.

Las Virgenes Municipal Water District. Tapia Water Reclamation Facility receiving water data.

Los Angeles County Sanitation Districts. Long Beach, Los Coyotes, Pomona, San Jose Creek, Saugus, Valencia and Whittier Narrows Water Reclamation Plants' receiving water data.

Ojai Valley Sanitation District.

Santa Barbara ChannelKeeper. Ventura River Watershed Monitoring Program.

Santa Monica BayKeeper. BeachKeeper Program: Citizen Water Quality Monitoring Data (January 1996-May 2001). Volumes I & II.

State Water Resources Control Board. Bay Protection and Toxic Cleanup Program.

State Water Resources Control Board. Beach Closure Report.

State Water Resources Control Board. Calleguas Creek toxicity monitoring data.

State Water Resources Control Board. State Mussel Watch Program.

State Water Resources Control Board. Toxic Substances Monitoring Program.

United Water Conservation District.

University of California, Davis. Calleguas Creek toxicity monitoring program data.

Ventura County Department of Health Services. Shoreline bacteriological data.