Staff Report

VOLUME I

Revision of the Clean Water Act Section 303(d) List of Water Quality Limited Segments

CALIFORNIA
Water Boards

State Water Resources Control Board
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

Division of Water Quality

SEPTEMBER 2006

COV0117

DRAFT

STATE WATER RESOURCES
CONTROL BOARD
P.O. 100
Sacramento, CA 95812-0100

To request copies of this draft final staff report
please call Dorena Goding at
(916) 341-5596.

Documents are also available at:

http://www.swrcb.ca.gov

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

September 2006
DRAFT FINAL

Preface

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

This document presents recommendations for additions, deletions, and changes to the 2002 California section 303(d) list. Recommendations ~~are also made~~have been included for ~~when~~ completion dates for Total Maximum Daily Loads (TMDLs) ~~will be completed~~. The report provides a summary of list changes and the SWRCB staff analysis of data and information.

This staff report has ~~three~~ four parts: (1) Volume I ~~which~~ contains the listing methodology and a summary of the proposed additions, deletions, changes, and TMDL schedules; (2) Volume II ~~which~~ contains summaries of the listing and delisting proposals for the North Coast, San Francisco Bay, Central Coast, and Los Angeles regions; ~~and~~ (3) Volume III ~~which~~ contains summaries of the listing and delisting proposals for the Central Valley, Lahontan, Colorado River Basin, Santa Ana, and San Diego regions and (4) Volume IV contains written responses to comments. Each proposal is presented in a water body fact sheet that summarizes listing status weight of evidence and the relationships between each line of evidence. ~~Reports have also been prepared that document those waters where data were reviewed but no change is listing status is proposed.~~Fact sheets were also prepared when review of data resulted no change in listing status of water bodies.

SWRCB ~~will~~ accepted testimony at northern and southern California workshops on the proposed changes to the 2002 section 303(d) list. ~~After responses to comments are developed, the~~ SWRCB will consider approval of the 2006 section 303(d) list at its October 25, 2006 meeting. Once approved, the list and supporting information will be submitted to USEPA.

Table of Contents

List of Appendices

List of Tables

List of Abbreviations

AU	Assessment unit
Basin Plan	Regional Water Quality Control Plan
BPTCP	Bay Protection and Toxic Cleanup Program
CalEPA	California Environmental Protection Agency
CCAMP	Central Coast Ambient Monitoring Program
CCC	Criteria Continuous Concentration
CCR	California Code of Regulations
CDF	California Department of Forestry and Fire Protection
CFCP	Coastal Fish Contamination Program
CFR	Code of Federal Regulations
CMC	Criteria Maximum Concentration
CSTF	Contaminated Sediment Task Force
CTR	California Toxics Rule
CWA	Clean Water Act
^{o}C	degrees Celsius
^{o}F	degrees Fahrenheit
DDE	Dichlorodiphenyldichloroethylene
DDT	Dichlorodiphenyltrichloroethane
DFG	California Department of Fish and Game
DHS	California Department of Health Services
DO	Dissolved oxygen
dw	dry weight
EDL	Elevated Data Level
ERM	Effects Range Median
HCH	Hexachlorocyclohexane
HSA	Hydrologic Sub Area
HU	Hydrologic Unit
kg	kilogram(s)
Listing Policy	Water Quality Control Policy for Developing California's Section 303(d) List
LOE	Line of Evidence
MCL	Maximum Contaminant Level
MDL	Method Detection Limit
mg/kg	milligrams per kilogram (parts per million)
mg/L	milligrams per liter (parts per million)
µg/g	micrograms per gram (parts per million)
µg/L	micrograms per liter (parts per billion)
MPN	Most Probable Number
MTBE	Methyl tertiary-butyl ether
MTRL	Maximum Tissue Residue Level
NAS	National Academy of Sciences
ng/g	nanograms per gram (parts per billion)
ng/L	nanograms per liter (parts per trillion)
NOAA	National Oceanic and Atmospheric Administration

NPDES	National Pollutant Discharge Elimination System
NPS	Nonpoint Source
NTU	Nephelometric Turbidity Unit
oc	organic carbon
OEHHA	Office of Environmental Health Hazard Assessment
PAH	Polynuclear aromatic hydrocarbon
PBDE	Polybrominated diphenyl ethers
PCB	Polychlorinated biphenyl
PEL	Probable Effects Level
pg/L	picograms per liter
POTW	Publicly Owned Treatment Works
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
RBI	Relative Benthic Index
RL	Reporting Level
RWQCB	Regional Water Quality Control Board
SFEI	San Francisco Estuary Institute
SMWP	State Mussel Watch Program
SQG	Sediment quality guideline
SWAMP	Surface Water Ambient Monitoring Program
SWRCB	State Water Resources Control Board
TDS	Total Dissolved Solids
TIE	Toxicity Identification Evaluation
TMDL	Total Maximum Daily Load
TSMP	Toxic Substance Monitoring Program
TSS	Total Suspended Solids
UAA	Use Attainability Analysis
USBR	U.S. Bureau of Reclamation
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
WDR	Waste Discharge Requirement
WQO	Water quality objective
WQS	Water quality standard
ww	wet weight
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 2003 (SWRCB, 2003). Federal regulations require the section 303(d) list to be updated every two years.

The purpose of this staff report is to present proposals for revision of the State's section 303(d) list and to present recommendations for scheduling the completion of TMDLs. The staff report has ~~three~~ four parts: (1) Volume I ~~which~~ contains the listing methodology and a summary of the proposed additions, deletions, changes, and TMDL schedules; (2) Volume II ~~which~~ contains summaries of the proposals for the North Coast, San Francisco Bay, Central Coast, and Los Angeles regions; ~~and~~ (3) Volume III ~~which~~ contains summaries of the proposals for the Central Valley, Lahontan, Colorado River Basin, Santa Ana, and San Diego regions; and (4) Volume IV contains written responses to comments.

Background

The development of the section 303(d) list is governed by both federal and state requirements. Federal requirements are contained in the CWA and applicable sections of federal regulations. USEPA has prepared guidance to the states but the use of this guidance is not mandatory. State listing requirements are presented in the Water Quality Control Policy for Developing California's Section 303(d) List (SWRCB, 2004b).

Federal Listing Requirements

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. 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. 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. Under state law (Porter-Cologne Water

Quality Control Act, California Water Code section 13300 et seq.), 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 (State Water Resources Control Board (SWRCB) Resolution No. 68-16). 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." (40 CFR 130.2(j).

A TMDL must be developed for water quality limited segments still needing a TMDL. A TMDL ~~(40 CFR 130.2(j))~~ is the sum of the individual wasteload allocations for point sources, load allocations for nonpoint sources, and natural background, tributaries, or adjacent segments. (40 CFR 130.2(j))

States are required to review the section 303(d) list in even-numbered years, make changes as necessary, and submit the list to USEPA for approval.

State Listing Requirements

On September 30, 2004, SWRCB adopted the *Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List* (Listing Policy) (SWRCB, 2004b) in accordance with California Water Code section 13191.3(a). The Listing Policy identifies the process by which SWRCB and Regional Water Quality Control Boards (RWQCBs) will comply with the listing requirements of CWA section 303(d). The Listing Policy became effective in December 2004.

The objective of the Listing Policy is to establish a standardized approach for developing California's section 303(d) list with the overall goal of achieving water quality standards and maintaining beneficial uses in all of California's surface waters. TMDLs will be developed as needed for the waters identified under the provisions of the Listing Policy.

Decision Rules

The Listing Policy (SWRCB, 2004b) outlines a "weight of evidence" approach that provides the ~~decision~~ rules for making decisions based upon different kinds of data; an approach for analyzing data statistically; and requirements for data quality, data quantity, and administration of the listing process. Decision rules for listing and delisting are provided for: chemical-specific water quality standards; bacterial water quality standards; health advisories; bioaccumulation of chemicals in aquatic life tissues; nuisance such as trash, odor, and foam; nutrients; water and sediment toxicity; adverse biological response; and degradation of aquatic life populations and communities. The Listing Policy also requires that situation-specific weight of evidence listing or delisting factors be used if available information indicates water quality standards are not attained (or attained) and the other decision rules do not support listing or delisting. The federal requirement for setting priorities on which TMDLs will be developed first is addressed in the Listing Policy by the establishment of schedules for TMDL development.

The Listing Policy also provides direction related to:

1. The definition of readily available data and information.
2. Administration of the listing process including data solicitation and fact sheet preparation.
3. Interpretation of narrative water quality objectives using numeric evaluation guidelines.
4. Data quality assessments.
5. Data quantity assessments including water body specific information, data spatial and temporal representation, aggregation of data by reach/area, quantitation of chemical concentrations, evaluation of data consistent with the expression of water quality objectives or criteria, binomial model statistical evaluation, evaluation of bioassessment data, and evaluation of temperature data.

Justification of each portion of the Listing Policy is presented in the Final Functional Equivalent Document (SWRCB, 2004c) that was developed to support the provisions of the Listing Policy.

List Structure

The Listing Policy requires that all waters that do not meet water quality standards be placed on the section 303(d) list. The categories are (1) waters still requiring a TMDL, and (2) waters where the water quality limited segment is being addressed.

Water segments in the "Water Quality Limited Segments Being Addressed" category must meet either of the following conditions:

1. A TMDL has been developed and approved by USEPA and the approved implementation plan is expected to result in full attainment of the standard within a specified time frame; or
2. It has been determined that an existing regulatory program is reasonably expected to result in the attainment of the water quality standard within a reasonable, specified time frame.

Methodology Used to Develop the 2006 Section 303(d) List

Assumptions

In developing SWRCB staff recommendations, it was assumed that:

1. The 2002 section 303(d) list (Appendix 1) would form the basis for the 2006 list submittal.
2. The provisions of the Listing Policy would guide staff recommendations.
3. Waters that were previously removed from the section 303(d) list either because a TMDL was completed or because another program was addressing the water quality problem would be considered for placement on the section 303(d) list. It would be placed in the Water Quality Limited Segments Being Addressed category based on

the original data and information used to delist ~~plus~~and any additional data that has become available. If the listing was removed in 2002 based solely on the fact ~~solely on the basis~~ that the program would address the problem, section 3.11 of the Listing Policy was used as the listing factor.

4. Exotic or invasive species would be considered as pollutants and would be considered for inclusion on the section 303(d) list. In a~~A~~ recent unpublished Federal District C~~c~~ourt ruling (Northwest Environmental Advocates ~~et al.~~ vs. USEPA, WL 756614 (N.D. Cal. 2005)), the court found that invasive species are ~~considered to be~~ pollutants as defined in CWA.
5. Fact sheets would be developed for those water body pollutant combinations where there was a high likelihood of changing list status.
6. The staff report contains only those fact sheets that recommend a change in the section 303(d) list. Fact sheets are published in separate documents where the recommendations are (1) Do not list (SWRCB, ~~2005a~~2006a), or (2) Do not delist (SWRCB, ~~2005b~~2006b).
7. Water body or pollutant listings are independent of the TMDLs that have been approved and are being implemented for a water body. If a pollutant listing is removed from the list for any reason, that fact has no effect on the validity or requirements for implementing a TMDL that has been adopted and approved by USEPA. Implementation of Basin Plan provisions is not affected by the section 303(d) list.
8. Provisions of Basin Plans, statewide plans, and other documents containing water quality standards were used as they are written. Judgments were not made during the list development process regarding the suitability, quality, or applicability of beneficial uses or water quality objectives. Novel approaches for interpreting objectives were not used unless the approach was specifically allowed by the applicable water quality standards (e.g., analyzing wet and dry season data separately).

Data and Information Used

SWRCB solicited, assembled, and consider all readily available data and information. A public solicitation of data and information was begun in April 2004 (SWRCB, 2004a). This public data solicitation was concluded in June 2004. The data received generally covered the period of 2001 to early 2004. Some data were submitted that addressed pre-2002 listings. Data through March 2005 from the Surface Water Ambient Monitoring Program (SWAMP) were included in the record. Information through June 2006 was also used to assess which TMDLs had been completed. Other sources of data and information that became readily available to SWRCB staff were also included in the administrative record. Approximately one-third of the comment letters received during the public review period (September 2005 through January 2006) contained new data and information. All of this data and information was considered in developing recommendations for the 2006 section 303(d) list.

~~A list of~~ The references for data and information in the administrative record used for development of the 2006 section 303(d) list is presented in the Appendix 2. Data and information that were reviewed included:

- Data and information supporting the 2002 section 303(d) list, and the most recent section 305(b) report;
- Drinking water source assessments ~~to the extent they were available~~;
- Municipal Separate Storm Sewer System reports;
- Information on water quality problems in documents prepared to satisfy Superfund and Resource Conservation and Recovery Act requirements ~~to the extent they were available~~;
- Fish and shellfish advisories, beach postings and closures, or other water quality-based restrictions;
- Reports of fish kills, cancers, lesions or tumors;
- Dilution calculations, trend analyses, or predictive models for assessing the physical, chemical, or biological condition of streams, rivers, lakes, reservoirs, estuaries, coastal lagoons, or the ocean ~~to the extent they were available~~;
- Applicable water quality data and information from the Surface Water Ambient Monitoring Program (SWAMP), USEPA's Storage and Retrieval Database Access and other USEPA databases and information sources, the Bay-Delta Tributaries Database, Southern California Coastal Water Research Project, and the San Francisco Estuary Regional Monitoring Program; and
- Existing and readily available water quality data and information reported by local, state and federal agencies (including receiving water monitoring data from discharger monitoring reports), citizen monitoring groups, academic institutions, and the public.

SWRCB Staff Analysis and Recommendations

This section provides a description of the process for ~~developing of~~ fact sheet~~s~~ development, contents of the fact sheets, standards used, evaluation guidelines used, fact sheets for affected area changes, and the process for addressing ~~how~~ faulty listings ~~were addressed~~`.

Data Processing and Fact Sheet Development

All readily available data and information in the administrative record was considered in the development of the 2006 CWA section 303(d) list. SWRCB staff developed fact sheets summarizing the data used to make listing/delisting decisions.

Even though all data were reviewed and considered, fact sheets were not developed for every pollutant-water body combination reviewed. In general, fact sheets were developed for all waters and pollutants where water quality standards were not attained or where submitted data and information changed the draft staff recommendations (SWRCB, 2005c). Data sets were grouped into High, Medium and Low priorities for fact sheet development. The grouping were based on the following priorities:

1. High Priority
   - All data and information submitted by public during the 2004 data solicitation and other data made available to SWRCB staff and not previously reviewed.
   - All data and information submitted by the public during the comment period (i.e., between September 30, 2005 and January 31, 2006) if the new data and information changed the original staff recommendation(s) (presented in SWRCB, 2005c).
   - Written ~~R~~recommendations from the RWQCBs.
   - Data from water bodies not on the section 303(d) list where a preliminary examination of the data and information in the record indicated standards were not met.

2. Medium Priority
   - Data in the record for waters currently on the section 303(d) list where the pollutants are not listed.
   - Data and information for new listing recommendations or previous listings that were not analyzed in the original staff recommendations (SWRCB, 2005c) where staff was reasonably sure that the new information was not biased and it was apparent that listing status would change.

3. Low Priority
   - Data and information in the record for water body-pollutant combinations where a preliminary examination of the data indicated water quality standards were met.
   - Data for listings that were not analyzed in the original staff recommendations (SWRCB, 2005a; 2005b; 2005c) and a TMDL has been completed that addressed the listing.
   - Data for new or previous listings where the data were biased or the data were an incomplete basis for assessment.
   - Data without quality assurance information.
   - Data sets that had no supporting information or had no identifying information.
   - Data and information that could not be assessed because numeric water quality objectives, criteria, or evaluation guidelines are not available.

Contents of the Fact Sheets

Data and information from water bodies was assessed using the weight-of-evidence approach identified in the Listing Policy (SWRCB, 2004b). The weight-of-evidence approach was used to evaluate whether the evidence is in favor of or against placing waters on or removing waters from the section 303(d) list. If data and information were reviewed for a water body-pollutant combination not currently on the section 303(d) list, it was considered for listing (using the ~~de~~listing factors in section 3 of the Listing Policy [SWRCB, 2004b]). Conversely, if data and were reviewed for a water body-pollutant combination currently on the section 303(d) list, it was considered for delisting (using the delisting factors in section 4 of the Listing Policy [SWRCB, 2004b]).

The following steps describe the general steps in the weight-of-evidence approach:

1. Data and Information Processing: All data and information were evaluated using the decision rules listed in sections 3 or 4 of the Listing Policy and, as appropriate, applicable implementation factors (including sections 6.1.2.2 and 6.1.5.1 through 6.1.5.9). The schedule for completion of TMDLs was developed using the provisions of section 5 of the Listing Policy. Other information that could not be analyzed under the provisions of the Listing Policy was summarized in the fact sheets to the extent possible.

2. Data Assessment: An assessment in favor of or against a list action for a water body-pollutant combination was presented in the first part of the fact sheets. The assessment identified and discussed briefly the relationships between all summarized lines of evidence for the water body and pollutant. This assessment was made on a pollutant-by-pollutant (including toxicity) basis.

To the extent information was available, each fact sheet contained:
1. A descriptive name of the segment
2. The name of the pollutant or condition
3. A brief description of the recommendation for listing status (e.g., List, Do not list, Delist, Do not delist, Accept area change, or List as Being Addressed). To clarify staff recommendations an additional category of listing status was added to acknowledge placement of water body-pollutant combinations in the "being addressed" category of water quality limited segments.
4. A description of the "weight of evidence" conclusion was summarized for the water body-pollutant combination. This section included identification of the portion of the Listing Policy used, lines of evidence needed, a brief summary of the lines of evidence (LOE), a conclusion, and the basis for the staff findings.
5. A staff recommendation.
6. The weight of evidence section was followed by summaries of each LOE. In general each LOE contained descriptions of:
   A. The beneficial use(s) being addressed by data and information
   B. The matrix (e.g., water, sediment, or tissue)
   C. The water quality objective or water quality criterion
   D. The evaluation guideline used (if the water quality objective was narrative)
   E. The data or information used to assess water quality
   F. The spatial representation of the data and information
   G. The temporal representation of the data and information
   H. Data quality assessment
   I. Other information needed to summarize the data and information.

Standards

This section of the staff report outlines the sources used that identified beneficial uses of water, water quality objectives or water quality criteria, and, for interpretation of narrative water quality objectives, the evaluation guidelines used.

Beneficial Uses

The beneficial uses for waters for the state are identified in the Regional Water Quality Control Plans (Basin Plans). If beneficial uses were not identified for a water body in

the Basin Plans and the uses existed in the water body, then waters were assessed using the existing beneficial uses of water.

Water Quality Objectives/Water Quality Criteria

The water quality objectives and water quality criteria used in the assessments were from the following sources:

- Basin Plans
- Statewide Water Quality Control Plans (e.g., the California Ocean Plan)
- California Toxics Rule (40 CFR 131.38)
- Bacteria standards at bathing beaches (17 CCR 7958)
- Maximum Contaminant Levels to the extent applicable [e.g., Table 64431-A (Inorganic Chemicals) and 64431-B (Fluoride) of 22 CCR section 64431, Table 64444-A (Organic Chemicals) of 22 CCR section 64444, and Tables 64449-A (Secondary Maximum Contaminant Levels-Consumer Acceptance Limits) and 64449-B (Secondary Maximum Contaminant Levels-Ranges) of 22 CCR section 64449]

Guidelines

Narrative water quality objectives were evaluated using evaluation guidelines as allowed by the Listing Policy. When evaluating narrative water quality objectives or beneficial use protection, SWRCB staff identified evaluation guidelines that represent standards attainment or beneficial use protection.

In selecting an evaluation guideline, SWRCB staff:

- Identified the water body, pollutants, and beneficial uses;
- Identified the narrative water quality objectives or applicable water quality criteria;
- Identified the appropriate interpretive evaluation guideline that potentially represented water quality objective attainment or protection of beneficial uses. Depending on the beneficial use and narrative standard, the following considerations were used in the selection of evaluation guidelines:

    1. Sediment Quality Guidelines for Marine, Estuarine, and Freshwater Sediments: SWRCB staff selected sediment quality guidelines published in the peer-reviewed literature or developed by state or federal agencies. Acceptable guidelines included selected values (e.g., effects range-median, probable effects level, probable effects concentration), and other sediment quality guidelines. Only those sediment guidelines that are predictive of sediment toxicity were used (i.e., those guidelines that have been shown in published studies to be predictive of sediment toxicity in 50 percent or more of the samples analyzed). The sediment quality guidelines used are presented in Table 1.

TABLE 1: SEDIMENT QUALITY GUIDELINES FOR MARINE, ESTUARINE, AND FRESHWATER SEDIMENTS

Chemical	Marine and Estuarine Sediments			Freshwater Sediments
	Effects Range-Median[1]	Probable Effects Level[2]	Other Sediment Quality Guidelines	Probable Effect Concentration[3]
Antimony	25 µg/g dw			
Arsenic	70 µg/g dw			33.0 mg/kg dw
Cadmium		4.21 µg/g dw		4.98 mg/kg dw
Chromium	370 µg/g dw			111 mg/kg dw
Copper	270 µg/g dw			149 mg/kg dw
Lead		112.18 µg/g dw		128 mg/kg dw
Mercury			2.1 µg/g[4]	1.06 mg/kg dw
Nickel				48.6 mg/kg dw
Silver		1.77 µg/g dw		
Zinc	410 µg/g dw			459 mg/kg dw
Chlordane				17.6 µg/kg dw
Total Chlordane	6 ng/g[5] dw			
Dieldrin	8 ng/g dw			61.8 µg/kg dw
Sum DDD				28.0 µg/kg dw
Sum DDE				31.3 µg/kg dw
Sum DDT				62.9 µg/kg dw
Total DDTs				572 µg/kg dw
Endrin			0.76 µg/g oc[6]	207 µg/kg dw
Lindane			0.37 µg/g oc[8]	4.99 µg/kg dw
Total PCBs			400 ng/g[7]	676 µg/kg dw
Anthrazene				845 µg/kg dw
Fluorene				536 µg/kg dw
Naphthalene				561 µg/kg dw
2-methyl-naphthalene		201.28 ng/g dw		
Phenanthrene		543.53 ng/g dw		1,170 µg/kg dw
Low molecular weight PAHs		1,442 ng/g dw		
Benz[a]anthrazene		692.53 ng/g dw		1,050 µg/kg dw
Benzo[a]pyrene		763.22 ng/g dw		1,450 µg/kg dw
Chrysene		845.98 ng/g dw		1,290 µg/kg dw
Dibenz[a,h]-Anthrazene	260 ng/g dw			
Fluoranthene				2,230 µg/kg dw
Pyrene		1,397.4 ng/g dw		1,520 µg/kg dw
High molecular weight PAHs	9,600 ng/g dw			
Total PAHs			1,800 µg/g[8]	22,800 µg/kg dw

[1]Long et al., 1995
[2]MacDonald et al., 1996
[3]MacDonald et al., 2000a
dw = Dry Weight
[4]PTI Environmental Services, 1991
[5]Long and Morgan, 1990
[6]USEPA, 1993d
[7]MacDonald et al., 2000b
[8]Fairey et al., 2001
oc = Organic Carbon

2. Evaluation Guidelines for Protection from the Consumption of Fish and Shellfish: SWRCB staff used evaluation guidelines published by USEPA or OEHHA. Maximum Tissue Residue Levels (MTRLs) and Elevated Data Levels (EDLs) were not used to evaluate fish or shellfish tissue data. The tissue guidelines used are presented in Table 2.

TABLE 2: SCREENING VALUES FOR THE PROTECTION OF HUMAN HEALTH FROM THE CONSUMPTION OF FISH AND SHELLFISH

Contaminant	OEHHA Screening Values[1]	USEPA Screening Values[2]
Arsenic	1.0 mg/kg	1.2 mg/kg[3]
Cadmium	3.0 mg/kg	
Mercury	0.3 mg/kg	
Selenium	2.0 mg/kg	
Tributyltin		1.2 mg/kg
Total DDT	100 μg/kg	
Total PCBs	20 μg/kg	
Total PAHs		5.47 μg/kg
Chlordane (total)	30 μg/kg	
Dieldrin	2.0 μg/kg	
Endosulfan (total)	20,000 μg/kg	
Endrin	1,000 μg/kg	
Lindane (gamma hexachlorocyclohexane)	30 μg/kg	
Heptachlor epoxide	4.0 μg/kg	
Hexachlorobenzene	20 μg/kg	
Methyl mercury	0.3 mg/kg[4]	
Mirex		800 μg/kg
Toxaphene	30 μg/kg	
Diazinon	300 μg/kg	
Chlorpyrifos	10,000 μg/kg	
Disulfoton	100 μg/kg	
Terbufos		80 μg/kg
Oxyfluorfen		546 μg/kg
Ethion	2,000 μg/kg	
Dioxin	0.3 ng/kg	

[1]Brodberg and Pollock, 1999
[2]USEPA, 2000b
[3]USEPA, 2000a
[4] Klassing and Brodberg, 2004

mg/kg = milligrams per kilogram (parts per million)
ng/kg = nanograms per kilogram
(measurements based on wet tissue samples)

3. Evaluation Guidelines for Protection of Aquatic Life from Bioaccumulation of Toxic Substances: SWRCB staff used evaluation values for the protection of aquatic life published by the National Academy of Science. These tissue guidelines are presented in Table 3.

TABLE 3: WILDLIFE PROTECTION CRITERIA FOR EVALUATION OF BIOACCUMULATION MONITORING DATA

Contaminant	NAS Guidelines*
Aldrin	100 µg/kg
Total DDT	1,000 µg/kg
Total PCBs	500 µg/kg
Chlordane (total)	100 µg/kg
Dieldrin	100 µg/kg
Endosulfan (total)	100 µg/kg
Endrin	100 µg/kg
Lindane (gamma hexachlorocyclohexane)	100 µg/kg
~~h~~Hexachlorocyclohexane (total)	100 µg/kg
Heptachlor	100 µg/kg
Heptachlor epoxide	100 µg/kg
Toxaphene	100 µg/kg

*NAS, 1972. µg/kg = micrograms per kilogram (measurements based on wet tissue samples)

4. Water Quality Guidelines: SWRCB staff used water quality evaluation guidelines that were:
   - Applicable to the beneficial use.
   - Protective of the beneficial use.
   - Linked to the pollutant under consideration.
   - Scientifically-based and peer reviewed.
   - Well described.
   - Identified a range above which impacts occur and below which no or few impacts are predicted.

   These water quality guidelines are presented in Table 4.

TABLE 4: WATER QUALITY GUIDELINES

Pollutant	Water Quality Guidelines*
Chlorpyrifos – 4-day average (freshwater)	0.014 µg/L[1]
Chlorpyrifos – 1-hour average (freshwater)	0.025 µg/L[1]
Diazinon – 4-day average (freshwater)	0.1 µg/L[1]
Diazinon – 1-hour average (freshwater)	0.16 µg/L[1]
Perchlorate (for protection of drinking water quality)	6.0 µg/L[2]
Temperature, 7-day mean (for protection of coho salmon)	14.8°C[3]
Temperature, 7-day mean (for protection of steelhead or rainbow trout)	17.0°C[3]
Temperature, maximum weekly average temperature (for protection of coho salmon)	19.7°C[3]
Temperature, maximum weekly average	19.6°C[3]

Pollutant	Water Quality Guidelines*
temperature (for protection of steelhead or rainbow trout)	
Temperature, maximum annual average temperature (for protection of steelhead or rainbow trout)	21.0°C[3]
Turbidity (for protection of fish populations)	25 NTU[4]

[1]Siepmann and Finlayson, 2000; Finlayson, 2004
[2]Fan et al., 2004
[3]Sullivan et al., 2000
[4]Sigler et al., 1984

Exotic/Invasive Species

On March 30, 2005, the U.S. District Court for the Northern District of California granted summary judgment to the plaintiffs in Northwest Environmental Advocates, et al. vs. USEPA (2005). The suit challenged 30-year old federal regulations that exempted ballast water from the NPDES requirement. The Judge ruled that, among other things, ballast water contains many varieties of pollutants, including "invasive species," which the court held are "biological materials" within the definition of "pollutants" as described in CWA.

When the Listing Policy was developed SWRCB relied on USEPA's 1999 determination that exotic/invasive species did not fall under CWA definition of "pollutant" (SWRCB, 2004c). This position is no longer supported by USEPA in light of the court's ruling.

In developing recommendations for the 2006 section 303(d) list, the provisions of the Listing Policy were applied to the data and information available for exotic/invasive species. At present, no evaluation guidelines are available that can be used to assess the potential for impact from exotic species. However, studies were available in the record that allowed a review of the trends in the presence of some exotic/invasive species and their potential influence on native species. To evaluate these trends, section ~~3.9~~3.10 of the Listing Policy was used. In these assessments if native species declined as exotic/invasive species diversity or abundance increased then it was inferred that exotic species contributed to or caused the impacts on native species. Changes in relative diversity and abundance of native species may also be caused by habitat alteration, changes in water flow, or hydromodification.

Affected Area Changes

For the section 303(d) list, the "size affected" is an estimated value and many of the listings cover 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 section 303(d)-listed waters.

The "size affected" values for the 2006 section 303(d) list submittal have been changed in several cases to reflect the more precise measurements obtained from the GIS

database (GeoWBS) and to more precisely reflect the spatial extent of where standards are not attained.

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.

Major changes in the affected area for individual water bodies were described or acknowledged in fact sheets.

Faulty Listings

During the development of the 2006 section 303(d) list, several listings were reevaluated when it was clear that the original data, guideline, or basis for the listing was "faulty~~.~~" or the original analysis was flawed. The Listing Policy and federal regulation allows these kinds of listing errors to be corrected.

Section 4 of the Listing Policy states:

> "All listings of water segments shall be removed from the section 303(d) list if the listing was based on faulty data, and it is demonstrated that the listing would not have occurred in the absence of such faulty data. Faulty data include, but are not limited to, typographical errors, improper quality assurance/quality control procedures, or limitations related to the analytical methods that would lead to improper conclusions regarding the water quality status of the segment."

Federal regulation also allows states to remove waters from the section 303(d) list for good cause. Federal regulation (40 CFR section 130.7(b)(6)(iv)) states:

> "Upon request by the Regional Administrator, each State must demonstrate good cause for not including a water or waters on the list. Good cause includes, but is not limited to, more recent or accurate data; more sophisticated water quality modeling; **flaws in the original analysis that led to the water being listed** in the categories in §130.7(b)(5); or changes in conditions, e.g., new control equipment, or elimination of discharges." [Emphasis added.]

~~In addition to these factors w~~Waters and pollutants were recommended for removal from the list if:

- The original listing was not justified by any data. ~~Data or information to support the original listing simply does not exist.~~
- Information justifying the original listing was anecdotal.
- The evaluation guideline used originally would lead to improper conclusions regarding the status of the water segment. An evaluation guideline that does not satisfy the requirements of section 6.1.3 of the Listing Policy would lead to an improper conclusion. If data were reanalyzed using a defensible guideline, the water body-pollutant combination was considered for listing as if it had never been listed before (i.e., section 3 of the Listing Policy was used). This approach was used to

avoid requiring a large burden of proof to delist a water body pollutant combination if the original listing was found to be baseless in terms of Listing Policy procedures.

Each fact sheet for faulty or flawed listing contains the justification for removal from the section 303(d) list.

TMDL Scheduling

A schedule is recommended for waters on the section 303(d) list that identifies the TMDLs that will be established within the current listing cycle and the number of TMDLs scheduled to be developed thereafter.

For water quality limited segments needing a TMDL, a completion schedule was developed (in compliance with federal law and regulation) based on the following Listing Policy provisions:

- 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 objectives 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)];
- Degree of impairment;
- Potential threat to human health and the environment;
- Water quality benefits of activities ongoing in the watershed;
- Potential for beneficial use protection and recovery;
- Degree of public concern;
- Availability of funding; and
- Availability of data and information to address the water quality problem.

The recommendation for TMDL completion is the year that RWQCB will adopt the TMDL. In some circumstances TMDLs have been adopted by RWQCBs in the past but the approvals from SWRCB or USEPA are pending. In these cases, the water body-pollutant combination will remain in the Water Quality Limited Segments category of the section 303(d) list. For those TMDLs that have been developed and approved by USEPA and the implementation plans ~~has~~ have been approved, the water body and pollutant was placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list.

TMDLs with completion dates prior to the next list update (scheduled currently for 2008) already have resources dedicated to the effort. Schedules for non-consent decree TMDLs scheduled to be completed after 2008 should be considered tentative. Changes to the section 303(d) list in the future could result in substantial changes to scheduled completion dates established for completion after 2008.

Public Participation

The SWRCB ~~has scheduled~~ held public workshops to receive comment on the proposed section 303(d) list. The first workshop ~~will be~~ was held in southern California

(on ~~December 1, 2005~~December 6, 2005) and the second workshop ~~will be~~ was held in northern California (on ~~December 6, 2005~~January 5, 2006). The SWRCB staff ~~will~~ responded in writing to all comments received. The responses are presented in Volume IV of the staff report.

Additions, Deletions, and Changes

The basis for the 2006 section 303(d) list is the 2002 list (Appendix 1). All listings in 2002 section 303(d) list will remain unless a change is recommended in this staff report. A summary of the number recommendations to add or delete waters and pollutants on the section 303(d) list is presented in Table 5. It is recommended that SWRCB add ~~463~~ 365 water quality limited segments (water body-pollutant combinations) to the section 303(d) list. It is further recommended that ~~177~~193 water body-pollutant combinations be removed from the section 303(d) list. A summary of the number of recommendations to add waters and pollutants to the Water Quality Limited Segments Being Addressed category of the section 303(d) list is presented in Table 6. A total of 372 water body-pollutant combinations are recommended to be placed in this category.

The additions and deletions are presented in Tables ~~6~~7 and ~~7~~8, respectively. Several changes to the affected area for a variety of listings are also recommended (Table 9~~8~~). The specific additions to the "Being Addressed" category are presented in Table 10. Each of these proposed changes are documented in fact sheets contained in Volumes II and III of this staff report.

TABLE 5: SUMMARY OF RECOMMENDATIONS FOR NEW LISTINGS AND DELISTINGS.

Region	Numbers of Recommendations to	
	List	Delist
North Coast (1)	~~11~~ 9	~~6~~ 5
San Francisco Bay (2)	~~40~~ 30	~~22~~23
Central Coast (3)	~~71~~ 50	20
Los Angeles (4)	~~91~~ 65	~~95~~ 99
Central Valley (5)	~~46~~ 40	~~4~~ 7
Lahontan (6)	~~8~~ 5	~~24~~ 29
Colorado River Basin (7)	~~29~~ 26	~~0~~ 1
Santa Ana (8)	~~45~~ 31	4
San Diego (9)	~~122~~ 109	5
Statewide	~~463~~ 365	~~177~~ 193

TABLE 6: SUMMARY OF RECOMMENDATIONS FOR PLACING WATERS AND POLLUTANTS IN THE WATER QUALITY LIMITED SEGMENTS BEING ADDRESSED CATEGORY OF THE SECTION 303(D) LIST.

Region	Numbers of Recommendations to List in the Being Addressed Category
North Coast (1)	24
San Francisco Bay (2)	9
Central Coast (3)	32
Los Angeles (4)	216
Central Valley (5)	49
Lahontan (6)	8
Colorado River Basin (7)	5
Santa Ana (8)	23
San Diego (9)	4
Statewide	370

The 2002 section 303(d) list has 1,883 water body-pollutant combinations. With the recommendations presented in Table 5, the portion of the section 303(d) still needing TMDLs would increase by ~~286~~ 172 water quality limited segments.

Schedules

In developing the 2006 section 303(d) submittal, the staff reassessed the priorities established in the 2002 section 303(d) list. Based on budgeted resources currently available and the factors presented in section 5 of the Listing Policy, SWRCB staff recommends the schedules for completion of TMDLs in Table ~~9~~11. All other waters, not presented in Table ~~9~~11, are recommended for completion by 2019.

Administrative Record

The administrative record contains all data and information used in the development of the 2006 section 303(d) list. Copies of the staff documents supporting the 2006 list submittal are posted on the SWRCB website at:

http://www.waterboards.ca.gov/tmdl/303d_update.html

The administrative record supporting the proposed 2006 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 Mr. Randal Yates at (916) 341-5533.

References

Brodberg, P.K., and G.A. Pollock. 1999. Prevalence of selected target chemical contaminants in sport fish from two California lakes: Public health designed screening study. Sacramento, CA: Pesticide and Environmental Toxicology Section, Office of Environmental Health Hazard Assessment. California Environmental Protection Agency.

Fairey, R., E.R. Long, C.A. Roberts, B.R. Anderson, B.M. Phillips, J.W. Hunt, H.R. Puckett, and C.J. Wilson. 2001. An evaluation of methods for calculating mean sediment quality guideline quotients as indicators of contamination and acute toxicity to amphipods by chemical mixtures. *Environmental Toxicology and Chemistry* 20: 2276-2286.

Finlayson, B. 2004. Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Sacramento, CA: Pesticide Investigations Unit, Department of Fish and Game.

Klassing, S., and B. Brodberg. 2004. Fish consumption guidelines for Lake Natoma and the Lower American River, Sacramento County. Sacramento, CA: Office of Environmental Health Hazard Assessment.

Long, E.R., D.D. MacDonald, S.L. Smith, and F.L. Calder. 1995. Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuarine sediments. *Environ. Manag*. 19(1): 81-97.

Long, E.R., and L.G. Morgan. 1990. The potential for biological effects of sediment-sorbed contaminants tested in the National Status and Trends Program. NOAA Technical Memorandum NOS OMA 52. Seattle, WA: National Oceanic and Atmospheric Administration.

MacDonald, D.D., C.G. Ingersoll, and T.A. Berger. 2000a. Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. *Arch. Environ. Contam. Toxicol*. 39: 20-31.

MacDonald, D.D., L.M. Dipinto, J. Fields, C.G. Ingersoll, E.R. Long, and R.C. Swartz. 2000b. Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls*. Environ. Toxicol. Chem.* 19(5): 1403-1413.

MacDonald, D.D., R.S. Carr, F.D. Calder, E.R. Long, and C.G. Ingersoll. 1996. Development and evaluation of sediment quality guidelines for Florida coastal waters. *Ecotoxicology.* 5: 253-278.

NAS~~, National Academy of Engineering~~. ~~1973~~1972. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency.

Northwest Environmental Advocates, The Ocean Conservancy, and Waterkeepers of Northern California and its projects Center for Marine Conservation, and San Francisco Baykeeper and Deltakeeper vs. USEPA. 2005. Order granting plaintiff's motion for summary judgment; denying defendant's motion for summary judgment. No. C 03-05760 SI. U.S. District Court for the Northern California District of California.

PTI Environmental Services. 1991. Pollutants of concern in Puget Sound. EPA 910/9-91-003. Seattle, WA: U.S. Environmental Protection Agency.

Siepmann, S., and B. Finlayson. 2000. Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA. Pesticide Investigations Unit, Office of Spills and Response. California Department of Fish and Game.

Sigler, J.W., T.C. Bjornn, and F.H. Everest. 1984. Effects of chronic turbidity on density and growth of steelheads and coho salmon. *Transactions of the American Fisheries Society* 113:142-150.

Sullivan, K., D.J. Martin, R.D. Cardwell, J.E. Toll, and S. Duke. 2000. An analysis of the effects of temperature on salmonids of the Pacific Northwest with implications for selecting temperature criteria. Portland, OR: Sustainable Ecosystem Institute.

SWRCB. 2003. 2002 CWA section 303(d) list of water quality limited segments. SWRCB Resolution No. 2003-0009. Approved by USEPA July 2003. Sacramento, CA: State Water Resources Control Board.

SWRCB. 2004a. Notice of public solicitation of water quality data and information—2004 ~~c~~Clean ~~w~~Water ~~a~~Act section 303(d) list. Letter sent to interested parties by Celeste Cantu, Executive Director. Sacramento, CA: State Water Resources Control Board.

SWRCB. 2004b. Water Quality Control Policy for Developing California's Section 303(d) List. Resolution No. 2004-0063. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency.

SWRCB. 2004c. Final Functional Equivalent Document: Water Quality Control

Policy for Developing California's Section 303(d) List. Resolution No. 2004-0063. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency.

SWRCB. 2005a. Evaluation of data and information related to the Clean Water Act section 303(d) list of water quality limited segments. Water body fact sheets supporting "Do Not List" recommendations. Sacramento, CA: Division of Water Quality, State Water Resources Control Board.

SWRCB. 2005~~a~~b. Evaluation of data and information related to the Clean Water Act section 303(d) list of water quality limited segments. Water body fact sheets supporting "Do Not Delist" recommendations. Sacramento, CA: Division of Water Quality, State Water Resources Control Board.

SWRCB. 2005c. Revision of the Clean Water Act section 303(d) list of water quality limited segments. Three Volumes. Sacramento, CA: Division of Water Quality, State Water Resources Control Board.

SWRCB. 2006a. Evaluation of data and information related to the Clean Water Act section 303(d) list of water quality limited segments. Water body fact sheets supporting "Do Not List" recommendations. Sacramento, CA: Division of Water Quality, State Water Resources Control Board.

SWRCB. 2006b. Evaluation of data and information related to the Clean Water Act section 303(d) list of water quality limited segments. Water body fact sheets supporting "Do Not Delist" recommendations. Sacramento, CA: Division of Water Quality, State Water Resources Control Board.

USEPA. 1993d. Technical basis for establishing sediment quality criteria for nonionic contaminants for the protection of benthic organisms using equilibrium partitioning. EPA-822-R-93-011. Washington, D.C.: Office of Science and Technology, U.S. Environmental Protection Agency.

USEPA. 2000a. Guidance for the data quality objectives process. EPA-600-R-96-055, EPA QA/G-4. Washington, D.C: Office of Research and Development, U.S. Environmental Protection Agency.

USEPA. 2000b. Guidance for assessing chemical contaminant data for use in fish advisories. Volume 1: Fish sampling and analysis. Third edition. EPA-823-B-00-007. Washington, D.C.: Office of Water, U.S. Environmental Protection Agency.

TABLE 7: ADDITIONS TO THE SECTION 303(D) LIST.

Region	Water Segment	Pollutant
1		
	Bodega HU, Bodega Harbor HA	Exotic Species
	Clair Engle Lake	Mercury
	~~Klamath River HU, Lower HA, Klamath Glen HSA~~	~~Sedimentation/Siltation~~
	Mendocino Coast HU, Albion River HA, Albion River	Temperature, water
	~~Mendocino Coast HU, Garcia River HA, Garcia River~~	~~Sediment~~
	Mendocino Coast HU, Noyo River HA, Noyo River	Temperature, water
	Mendocino Coast HU, Noyo River HA, Pudding Creek	Temperature, water
	Russian River HU, Lower Russian River HA, Guerneville HSA	pH
	Russian River HU, Middle Russian River HA, Big Sulphur Creek HSA	Specific Conductance
	Russian River HU, Middle Russian River HA, Laguna de Santa Rosa	Mercury
	~~Russian River HU, Middle Russian River HA, Santa Rosa Creek~~	~~Specific Conductance~~
	Trinity River HU, Upper HA, Trinity River, East Fork	Mercury
2		
	Anderson Reservoir	Mercury Polychlorinated biphenyls
	Bon Tempe Reservoir	Mercury
	Del Valle Reservoir	Mercury Polychlorinated biphenyls
	~~Hill Slough~~	~~Mercury~~
	Islais Creek	Sediment Toxicity ~~Bioassays for Estuarine and Marine Water~~
	Lafayette Reservoir	Mercury Polychlorinated biphenyls
	Lake Chabot (~~Solano~~Alameda Co)	Chlordane

Region	Water Segment	Pollutant
		DDT Dieldrin Mercury Polychlorinated biphenyls
	~~Napa River~~	~~Mercury~~
	Nicasio Reservoir	Mercury
	Oakland Inner Harbor (Fruitvale Site, part of SF Bay, Central)	Sediment Toxicity ~~Bioassays for Estuarine and Marine Water~~
	Pacific Ocean at Pillar Point	Mercury
	San Leandro Bay (part of SF Bay, Central)	Chlordane Dieldrin
	San Pablo Reservoir	Chlordane Dieldrin Heptachlor epoxide Polychlorinated biphenyls Toxaphene
	Shadow Cliffs Reservoir	Mercury Polychlorinated biphenyls
	Soulejule Reservoir	Mercury Polychlorinated biphenyls
	~~Stege Marsh~~	~~Chlordane~~ ~~Copper~~ ~~Dieldrin~~ ~~Mercury~~ ~~Polychlorinated biphenyls~~ ~~Zinc~~
	Stevens Creek	~~Chlordane~~ ~~Dieldrin~~ ~~Mercury~~ ~~Polychlorinated biphenyls~~ Toxicity
	Stevens Creek Reservoir	Chlordane Dieldrin Mercury Polychlorinated biphenyls
3		
	Arroyo Paredon	Boron Nitrate as Nitrate (NO3) Toxicity
	Bell Creek (Santa Barbara Co)	Nitrate as Nitrate (NO3)
	Bradley Canyon Creek	

Region	Water Segment	Pollutant
		Ammonia (Unionized) - Toxin Nitrate as Nitrate (NO3)
	Bradley Channel	Nitrate as Nitrate (NO3)
	Canada De La Gaviota	Boron
	~~Carbonera Creek~~	~~Nutrients~~
	Carneros Creek	Ammonia (Unionized) - Toxin
	Casmalia Canyon Creek	Sedimentation/Siltation
	Chorro Creek	Oxygen, Dissolved ~~Sedimentation/Siltation~~
	Cuyama River	Boron
	Franklin Creek	Nitrate as Nitrate (NO3)
	Gabilan Creek	Nitrate as Nitrate (NO3)
	Glen Annie Canyon	Nitrate as Nitrate (NO3)
	Llagas Creek	Nitrate as Nitrate (NO3)
	~~Lompico Creek~~	~~Nutrients~~
	~~Los Osos Creek~~	~~Fecal Coliform~~ ~~Sediment~~
	Main Street Canal	Ammonia (Unionized) - Toxin
	Moro Cojo Slough	Ammonia (Unionized) - Toxin
	Morro Bay	~~Arsenic~~ Oxygen, Dissolved ~~Pathogens~~ ~~Sedimentation/Siltation~~
	Natividad Creek	Nitrate as Nitrate (NO3)
	Old Salinas River Estuary	Ammonia (Unionized) - Toxin
	Orcutt Creek	Ammonia (Unionized) - Toxin Chlorpyrifos DDT Dieldrin
	Oso Flaco Creek	Ammonia (Unionized) - Toxin
	Oso Flaco Lake	Dieldrin
	Pajaro River	Boron
	~~Pennington Creek~~	

Region	Water Segment	Pollutant
		~~Fecal Coliform~~
	Prefumo Creek	
		Nitrate as Nitrate (NO3)
	Quail Creek	
		Nitrate as Nitrate (NO3)
	Rincon Creek	
		Boron Toxicity
	Salinas Reclamation Canal	
		Ammonia (Unionized) - Toxin
	Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)	
		Nitrate as Nitrate (NO3) Toxaphene
	San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)	
		Ammonia as Nitrogen ~~Boron~~ Nitrogen, Nitrite
	~~San Benito River~~	
		~~Fecal Coliform~~
	~~San Bernardo Creek~~	
		~~Fecal Coliform~~
	San Diego Creek	
		Toxaphene
	~~San Lorenzo Creek~~	
		~~Fecal Coliform~~
	~~San Lorenzo River~~	
		~~Nutrients~~ ~~Sediment~~
	San Luis Obispo Creek	
		Nitrate as Nitrate (NO3)
	~~San Luisito Creek~~	
		~~Total Fecal Coliform~~
	San Vicente Creek	
		Turbidity
	Santa Maria River	
		Ammonia (Unionized) - Toxin Chlorpyrifos DDT Dieldrin Endrin
	Santa Rita Creek (~~San Luis Obispo County~~Monterey County)	
		Nitrate as Nitrate (NO3)
	Santa Ynez River (below city of Lompoc to Ocean)	
		Nitrate as Nitrate (NO3)
	~~Shingle Mill Creek~~	
		~~Nutrients~~
	Shuman Canyon Creek	
		Sedimentation/Siltation
	Soda Lake	
		Ammonia (Unionized) - Toxin
	Tembladero Slough	

Region	Water Segment	Pollutant
		Ammonia (Unionized) - Toxin
	~~Warden Creek~~	
		~~Fecal Coliform~~
4		
	Aliso Canyon Wash	
		~~Bacteria Indicators~~Fecal Coliform
		Copper
	Ballona Creek	
		Cyanide
		~~Trash~~
	~~Ballona Creek Estuary~~	
		~~Copper~~
	Burbank Western Channel	
		~~Ammonia~~
		Copper
		Cyanide
		~~Fecal Coliform~~
		~~Nitrite~~
		~~Zinc~~
	Calleguas Creek Reach 3 (Potrero Road upstream to confluence with Conejo Creek on 1998 303d list)	
		Chlordane
		DDT
		Dieldrin
		Toxaphene
	Compton Creek	
		Trash
	Coyote Creek	
		~~Ammonia~~
		~~Cyanide~~
		Diazinon
		Nitrogen, Nitrite
		pH
	Dominguez Channel (lined portion above Vermont Ave)	
		~~Aluminum~~
		~~Enterococcus~~Sediment Toxicity
		~~Zinc~~
	Dominguez Channel Estuary (unlined portion below Vermont Ave)	
		Benzo(a)pyrene (PAHs)
		Benzo[a]anthracene
		Chrysene (C1-C4)
		Phenanthrene
		Polychlorinated biphenyls
		Pyrene
	~~Duck Pond Agricultural Drains/Mugu Drain/Oxnard Drain No 2~~	
		~~Chlordane~~
		~~DDT~~
		~~Toxaphene~~
	Echo Park Lake	
		Trash
	Lake Lindero	

Region	Water Segment	Pollutant
		Selenium
	~~Leo Carillo Beach (South of County Line)~~	
		~~Coliform Bacteria~~
	Lincoln Park Lake	
		Trash
	Los Angeles Harbor - Cabrillo Marina	
		DDT Polychlorinated biphenyls
	Los Angeles Harbor - Fish Harbor	
		Benzo[a]anthracene Chlordane Chrysene (C1-C4) Copper Dibenz[a,h]anthracene Lead Mercury Phenanthrene Pyrene Sediment Toxicity Zinc
	Los Angeles Harbor - Inner Cabrillo Beach Area	
		~~Bacteria Indicators~~ Copper ~~DDT~~ ~~Polychlorinated biphenyls~~
	Los Angeles River Estuary (Queensway Bay)	
		Sediment Toxicity Trash
	Los Angeles River Reach 1 (Estuary to Carson Street)	
		Cyanide Diazinon ~~Nutrients (Algae)~~ Trash
	Los Angeles River Reach 2 (Carson to Figueroa Street)	
		Trash
	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	
		~~Ammonia~~ Trash
	Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)	
		Trash
	Los Angeles River Reach 5 (within Sepulveda Basin)	
		Trash
	~~Los Angeles/Long Beach Inner Harbor~~	
		~~Copper~~ ~~DDT~~ ~~Polychlorinated biphenyls~~ Sediment Toxicity ~~Zinc~~
	~~Los Angeles/Long Beach Outer Harbor (inside~~	

Region	Water Segment	Pollutant
	~~breakwater)~~	
		~~DDT~~
	Los Cerritos Channel	
		~~Aluminum~~ Trash
		Bis(2ethylhexyl)phthalate
	Malibu Creek	
		~~Aluminum~~
		Selenium
		Sulfates
	~~Marina del Rey Harbor - Back Basins~~	
		~~Sediment Bioassays for Estuarine and Marine Water~~
	Peck Road Park Lake	
		Trash
	Piru Creek (from gaging station below Santa Felicia Dam to headwaters)	
		Chloride
	Port Hueneme Pier	
		Polychlorinated biphenyls
	~~Rio Hondo Reach 1 (Confl. LA River to Snt Ana Fwy)~~	
		~~Ammonia~~
	~~San Gabriel River Estuary~~	
		~~Ammonia as Nitrogen~~
	San Gabriel River Reach 1 (Estuary to Firestone)	
		~~Ammonia~~
		pH
	~~San Gabriel River Reach 2 (Firestone to Whittier Narrows Dam~~	
		~~Aluminum~~
		~~Ammonia~~
	~~San Gabriel River, East Fork~~	
		~~Trash~~
	~~San Jose Creek Reach 1 (SG Confluence to Temple St.)~~	
		~~Ammonia~~
	~~San Jose Creek Reach 2 (Temple to I-10 at White Ave.)~~	
		~~Ammonia~~
	San Pedro Bay Near/Off Shore Zones	
		Chlordane
	Santa Clara River Reach 1 (Estuary to Hwy 101 Bridge)	
		Toxicity
	Santa Clara River Reach 11 (Piru Creek, from confluence with Santa Clara River Reach 4 to gaging station below Santa Felicia Dam)	
		Boron
		Sulfates
	~~Santa Clara River Reach 5 (Blue Cut gaging station to West Pier Hwy 99 Bridge) (was named Santa Clara River Reach 7 on 2002 303(d) lists)~~	
		~~Aluminum~~
		~~Ammonia~~
		~~Chloride~~

Region	Water Segment	Pollutant
		~~Diazinon~~
		~~Polychlorinated biphenyls~~
	Santa Clara River Reach 11 (Piru Creek, from confluence with Santa Clara River Reach 4 to gaging station below Santa Felicia Dam)	
		Boron
		Sulfates
	Santa Clara River Reach 6 (W Pier Hwy 99 to Bouquet Cyn Rd) (was named Santa Clara River Reach 8 on 2002 303(d) lists)	
		~~Ammonia~~
		~~Chloride~~
		Chlorpyrifos
		Diazinon
		~~Nitrogen, Nitrite~~
		Toxicity
	Sawpit Creek	
		Bis(2ethylhexyl)phthalate
		Fecal Coliform
	Ventura Marina Jetties	
		DDT
		Polychlorinated biphenyls
5		
	American River, South Fork (below Slab Creek Reservoir to Folsom Lake)	
		Mercury
	Bear River (Amador Co, Lower Bear River Reservoir to Mokelumne River, N Fork)	
		Copper
	Carson Creek (from WWTP to Deer Creek)	
		Aluminum
		~~Copper~~
		Manganese
	~~Clear Lake~~	
		~~Mercury~~
	Cosumnes River	
		Exotic Species
	Deer Creek (Sacramento County)	
		Iron
	Del Puerto Creek	
		Pyrethroids
	Delta Waterways (Stockton Ship Channel)	
		Exotic Species
	Delta Waterways (central portion)	
		Exotic Species
	Delta Waterways (eastern portion)	
		Exotic Species
	Delta Waterways (export area)	
		Exotic Species
	Delta Waterways (northern portion)	
		DDT
		Exotic Species
		Mercury
		Polychlorinated biphenyls
	Delta Waterways (northwestern portion)	

Region	Water Segment	Pollutant
		Exotic Species
	Delta Waterways (southern portion)	
		DDT
		Exotic Species
	Delta Waterways (western portion)	
		Exotic Species
	Feather River, Lower (Lake Oroville Dam to Confluence with Sacramento River)	
		Chlorpyrifos
	Feather River, North Fork (below Lake Almanor)	
		Mercury
		Temperature, water
	~~Grasslands Marshes~~	
		~~Selenium~~
	Grayson Drain (at outfall)	
		Sediment Toxicity ~~Bioassays -- Chronic Toxicity -- Freshwater~~
	Ingram Creek (from confluence with Hospital Creek to Hwy 33 crossing)	
		Pyrethroids
	Ingram Creek (from confluence with San Joaquin River to confluence with Hospital Creek)	
		Pyrethroids
	Kaweah Lake	
		Mercury
	Lower Bear River Reservoir	
		Copper
	Main Drainage Canal	
		Diazinon
	Merced River, Lower (McSwain Reservoir to San Joaquin River)	
		Mercury
	Mokelumne River, North Fork	
		Copper
	Morrison Creek	
		Chlorpyrifos
	Natoma, Lake	
		Mercury
	Orestimba Creek (below Kilburn Road)	
		Sediment Toxicity ~~Bioassays -- Chronic Toxicity -- Freshwater~~
	~~Sacramento River (Keswick Dam to Cottonwood Creek)~~	
		~~Cadmium~~
		~~Copper~~
		~~Zinc~~
	Panoche Creek (Silver Creek to Belmont Avenue)	
		Selenium
	Sacramento River (Red Bluff to Knights Landing)	
		Mercury
	~~Salt Slough (upstream from confluence with San Joaquin River)~~	
		~~Selenium~~
	San Joaquin River (Friant Dam to Mendota Pool)	
		Exotic Species

Region	Water Segment	Pollutant
	~~San Joaquin River (Merced River to Tuolumne River)~~	~~Selenium~~
	Sugar Pine Creek (tributary to Lower Bear River Reservoir)	Copper
	Wadsworth Canal	Diazinon
	Willow Creek (Madera County)	Temperature, water
6	Bodie Creek	Mercury
	Crowley Lake	Ammonia Oxygen, Dissolved
	~~Heavenly Valley Creek (source to USFS boundary)~~	~~Sedimentation/Siltation~~
	~~Indian Creek Reservoir~~	~~Phosphorus~~
	Mammoth Creek	Mercury
	~~Mono Lake~~	~~Salinity/TDS/Chlorides~~
	~~Searles Lake~~	~~Petroleum Products~~ ~~Salinity/TDS/Chlorides~~
	Susan River	Mercury
7	Alamo River	Chlorpyrifos DDT Dieldrin Polychlorinated biphenyls ~~Sedimentation/Siltation~~ Toxaphene
	All American Canal	Specific Conductance Sulfates Total Dissolved Solids
	Coachella Valley Storm Channel	Toxaphene
	Colorado River (Imperial Reservoir to California-Mexico Border)	~~Manganese~~ Selenium
	Imperial Valley Drains	DDT Dieldrin Endosulfan Polychlorinated biphenyls Toxaphene
	New River (Imperial)	

Region	Water Segment	Pollutant
		Chlordane
		Chlorpyrifos
		DDT
		Diazinon
		Dieldrin
		Mercury
		~~Pathogens~~
		Polychlorinated biphenyls
		Selenium
		Toxaphene
		Toxicity
	Palo Verde Outfall Drain	
		DDT
8		
	Anaheim Bay	
		~~Polychlorinated biphenyls~~
		Sediment Toxicity
	Balboa Beach	
		DDT
		Dieldrin
		Polychlorinated biphenyls
	Big Bear Lake	
		~~Mercury~~
		Polychlorinated biphenyls
	Elsinore, Lake	
		Polychlorinated biphenyls
	Huntington Beach State Park	
		Polychlorinated biphenyls
	Huntington Harbour	
		Chlordane
		Lead
		Sediment Toxicity
	Newport Bay, Lower	
		~~Chlorpyrifos~~ Chlordane
		Copper
		DDT
		~~Diazinon~~
		~~Fecal Coliform~~
		~~Nutrients~~
		Polychlorinated biphenyls
		~~Sedimentation/Siltation~~
		Sediment Toxicity
	Newport Bay, Upper (Ecological Reserve)	
		~~Chlorpyrifos~~ Chlordane
		Copper
		DDT
		~~Diazinon~~
		~~Fecal Coliform~~
		~~Nutrients~~
		Polychlorinated biphenyls
		~~Sedimentation/Siltation~~
		Sediment Toxicity
	Peters Canyon Channel	
		DDT
		Toxaphene

Region	Water Segment	Pollutant
	Rhine Channel	
		Copper
		Lead
		Mercury
		Polychlorinated biphenyls
		Sediment Toxicity
		Zinc
	San Diego Creek Reach 1	
		~~Fecal Coliform~~
		~~Nutrients~~
		~~Sedimentation/Siltation~~
		Selenium
		~~Zinc~~ Toxaphene
	~~San Diego Creek Reach 2~~	
		~~Diazinon~~
		~~Nutrients~~
		~~Sedimentation/Siltation~~
		~~Unknown Toxicity~~
	~~Santa Ana Delhi Channel~~	
		~~Toxaphene~~
	Seal Beach	
		Polychlorinated biphenyls
9		
	Agua Hedionda Creek	
		Manganese
		Selenium
		Sulfates
	Barrett Lake	
		Color
		Manganese
		pH (high)
	~~Batiquitos Lagoon~~	
		~~Phosphorus~~
	Buena Creek	
		DDT
		Nitrate and Nitrite
		Phosphate
		Sulfates
	Buena Vista Creek	
		Sediment Toxicity ~~Bioassays -- Chronic Toxicity -- Freshwater~~
		~~Total Dissolved Solids~~
	Cottonwood Creek (in west San Diego County)	
		DDT
		Phosphorus
		Sediment Toxicity ~~Bioassays -- Chronic Toxicity -- Freshwater~~
	De Luz Creek	
		Iron
		Manganese
		~~Sulfates~~
	~~Del Dios Creek~~	
		~~Sulfates~~
	El Capitan Lake	
		~~Antimony~~

Region Water Segment	Pollutant
	~~Beryllium~~
	Color
	Manganese
	Total Dissolved Solids
	pH (high)
Encinitas Creek	
	Phosphorus
English Canyon	
	Benzo[b]fluoranthene
	Dieldrin
	Sediment Toxicity ~~Bioassays -- Chronic Toxicity -- Freshwater~~
Escondido Creek	
	DDT
	Manganese
	Phosphate
	Selenium
	Sulfates
	Total Dissolved Solids
Felicita Creek	
	Aluminum
Forester Creek	
	~~Oxygen, Dissolved~~
	Phosphorus
Green Valley Creek	
	Chloride
	Manganese
	Pentachlorophenol (PCP)
Hodges, Lake	
	Manganese
	Turbidity
	pH (high)
Kit Carson Creek	
	Pentachlorophenol (PCP)
Kitchen Creek	
	pH
Laguna Canyon Channel	
	Sediment Toxicity ~~Bioassays -- Chronic Toxicity -- Freshwater~~
~~Loma Alta Creek~~	
	~~Total Dissolved Solids~~
Long Canyon Creek	
	Total Dissolved Solids
Los Penasquitos Creek	
	Phosphate
	Total Dissolved Solids
Loveland Reservoir	
	Aluminum
	Manganese
	Oxygen, Dissolved
Miramar Reservoir	
	Sulfates
	Total Dissolved Solids
Morena Reservoir	
	Color

Region Water Segment	Pollutant
	Manganese
	pH (high)
Murray Reservoir	
	Total Dissolved Solids
	pH
Murrieta Creek	
	~~Arsenic~~
	~~Copper~~
	Iron
	Manganese
	Nitrogen
	~~Zinc~~
Oso Creek (at Mission Viejo Golf Course)	
	Chloride
	Sulfates
	Total Dissolved Solids
Otay Reservoir, Lower	
	Color
	Iron
	Manganese
	Nitrogen, ammonia (Total Ammonia)
	pH (high)
Pacific Ocean Shoreline, Imperial Beach Pier	
	Polychlorinated biphenyls
Pine Valley Creek (Upper)	
	Phosphorus
	Turbidity
Pogi Canyon Creek	
	DDT
Rainbow Creek	
	Iron
	Sulfates
	Total Dissolved Solids
Reidy Canyon Creek	
	Phosphorus
	~~Turbidity~~
San Diego Bay	
	Polychlorinated biphenyls
San Diego Bay Shoreline, Chula Vista Marina	
	Copper
San Diego Bay Shoreline, at Americas Cup Harbor	
	Copper
San Diego Bay Shoreline, at Coronado Cays	
	Copper
San Diego Bay Shoreline, at Glorietta Bay	
	Copper
San Diego Bay Shoreline, at Harbor Island (East Basin)	
	Copper
San Diego Bay Shoreline, at Harbor Island (West Basin)	
	Copper
San Diego Bay Shoreline, at Marriott Marina	
	Copper

Region	Water Segment	Pollutant
	San Juan Creek	
		DDE
	San Marcos Creek	
		DDE
		Phosphorus
		Sediment Toxicity ~~Bioassays -- Chronic Toxicity -- Freshwater~~
	San Marcos Lake	
		Ammonia as Nitrogen
		Nutrients
		Phosphorus
		~~Total Dissolved Solids~~
	San Vicente Reservoir	
		Chloride
		Color
		Manganese
		Sulfates
		Total Dissolved Solids
		pH (high)
	Sandia Creek	
		Iron
		Manganese
		Nitrogen
		Sulfates
	~~Santa Margarita River (Lower)~~	
		~~Mercury~~
	Soledad Canyon	
		Sediment Toxicity ~~Bioassays -- Chronic Toxicity -- Freshwater~~
	Sutherland Reservoir	
		Manganese
		pH (high)
	Sweetwater Reservoir	
		Oxygen, Dissolved
		Total Dissolved Solids
	Tecolote Creek	
		Phosphorus
		Turbidity
	Temecula Creek	
		Nitrogen
		Phosphorus
		Total Dissolved Solids
	Tijuana River Estuary	
		Turbidity

TABLE 8: ADDITIONS TO THE WATER QUALITY LIMITED SEGMENTS BEING ADDRESSED CATEGORY OF THE SECTION 303(D) LIST.

Region	Water Segment	Pollutant
1		
	Bodega HU, Estero de San Antonio HA, Stemple Creek/Estero do San Antonio	
		Nutrients
		Sediment
	Cape Mendocino HU, Mattole River HA, Mattole River	
		Sedimentation/Siltation
	Eel River HU, Middle Fork HA	
		Sedimentation/Siltation
	Eel River HU, North Fork HA	
		Sedimentation/Siltation
	Eel River HU, South Fork HA	
		Sedimentation/Siltation
	Eel River HU, Van Duzen River HA	
		Sedimentation/Siltation
	Klamath River HU, Salmon River HA	
		Temperature, water
	Klamath River HU, Scott River HA	
		Sedimentation/Siltation
		Temperature, water
	Mendocino Coast HU, Albion River HA, Albion River	
		Sedimentation/Siltation
	Mendocino Coast HU, Big River HA, Big River	
		Sedimentation/Siltation
	Mendocino Coast HU, Garcia River HA, Garcia River	
		Sediment
	Mendocino Coast HU, Gualala River HA, Gualala River	
		Sedimentation/Siltation
	Mendocino Coast HU, Navarro River HA	
		Sedimentation/Siltation
	Mendocino Coast HU, Navarro River HA, Delta	
		Sedimentation/Siltation
	Mendocino Coast HU, Noyo River HA, Noyo River	
		Sedimentation/Siltation
	Mendocino Coast HU, Rockport HA, Ten Mile River HSA	
		Sedimentation/Siltation
	Redwood Creek HU, Redwood Creek	
		Sedimentation/Siltation
	Trinity River HU, Lower Trinity HA	
		Sedimentation/Siltation
	Trinity River HU, Middle HA	
		Sedimentation/Siltation
	Trinity River HU, South Fork HA	
		Sedimentation/Siltation

Region	Water Segment	Pollutant
	Trinity River HU, Upper HA	Sedimentation/Siltation
	Trinity River HU, Upper HA, Trinity River, East Fork	Sedimentation/Siltation
2		
	Lagunitas Creek	Pathogens
	Stege Marsh	Chlordane Copper Dacthal Dieldrin Mercury Polychlorinated biphenyls Zinc
	Tomales Bay	Pathogens
3		
	Carbonera Creek	Nutrients Sedimentation/Siltation
	Chorro Creek	Fecal Coliform Sedimentation/Siltation
	Chumash Creek	Fecal Coliform
	Dairy Creek	Fecal Coliform Oxygen Saturation - Low Dissolved Oxygen
	Llagas Creek	Nutrients Sedimentation/Siltation
	Lompico Creek	Nutrients Sedimentation/Siltation
	Los Osos Creek	Fecal Coliform Nutrients Sediment
	Morro Bay	Pathogens Sedimentation/Siltation
	Pajaro River	Nutrients Sedimentation/Siltation
	Pennington Creek	Fecal Coliform
	Rider Creek	Sedimentation/Siltation
	San Benito River	Sedimentation/Siltation
	San Bernardo Creek	

Region	Water Segment	Pollutant
		Fecal Coliform
	San Lorenzo River	
		Nutrients
		Sediment
	San Luis Obispo Creek (Below W Marsh Street)	
		Nutrients
		Pathogens
	San Luisito Creek	
		Total Fecal Coliform
	Shingle Mill Creek	
		Nutrients
		Sedimentation/Siltation
	Walters Creek	
		Fecal Coliform
	Warden Creek	
		Fecal Coliform
	Watsonville Slough	
		Pathogens
4		
	Abalone Cove Beach	
		Indicator Bacteria
	Aliso Canyon Wash	
		Selenium
	Ballona Creek	
		Cadmium
		Copper
		Shellfish Harvesting Advisory
		Silver
		Toxicity
		Trash
		Viruses (enteric)
	Ballona Creek Estuary	
		Chlordane
		Copper
		DDT
		Lead
		Polychlorinated biphenyls
		Polycyclic Aromatic Hydrocarbons (PAHs)
		Sediment Toxicity
		Zinc
	Big Rock Beach	
		Coliform Bacteria
	Bluff Cove Beach	
		Indicator Bacteria
	Brown Barranca/Long Canyon	
		Nitrate and Nitrite
	Cabrillo Beach (Outer)	
		Indicator Bacteria
	Calleguas Creek Reach 1 (was Mugu Lagoon on 1998 303(d) list)	
		Chlordane
		DDT
		Endosulfan

Region	Water Segment	Pollutant
		Nitrogen
		Polychlorinated biphenyls
		Sediment Toxicity
	Calleguas Creek Reach 2 (estuary to Potrero Rd- was Calleguas Creek Reaches 1 and 2 on 1998 303d list)	
		Ammonia
		ChemA
		Chlordane
		DDT
		Endosulfan
		Nitrogen
		Polychlorinated biphenyls
		Sediment Toxicity
		Sedimentation/Siltation
		Toxaphene
	Calleguas Creek Reach 3 (Potrero Road upstream to confluence with Conejo Creek on 1998 303d list)	
		Nitrate and Nitrite
		Sedimentation/Siltation
	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on 1998 303d list)	
		ChemA
		Chlordane
		Chlorpyrifos
		DDT
		Dieldrin
		Endosulfan
		Nitrate as Nitrate (NO3)
		Nitrogen
		Polychlorinated biphenyls
		Sedimentation/Siltation
		Toxaphene
		Toxicity
	Calleguas Creek Reach 5 (was Beardsley Channel on 1998 303d list)	
		ChemA
		Chlordane
		Chlorpyrifos
		DDT
		Dacthal
		Dieldrin
		Endosulfan
		Nitrogen
		Polychlorinated biphenyls
		Sedimentation/Siltation
		Toxaphene
		Toxicity
	Calleguas Creek Reach 6 (was Arroyo Las Posas Reaches 1 and 2 on 1998 303d list)	
		Ammonia
		DDT

Region	Water Segment	Pollutant
		Nitrate and Nitrite
		Nitrate as Nitrate (NO3)
		Sedimentation/Siltation
	Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on 1998 303d list)	
		Ammonia
		Organophosphorus Pesticides
		Sedimentation/Siltation
	Calleguas Creek Reach 8 (was Tapo Canyon Reach 1)	
		Sedimentation/Siltation
	Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998 303d list)	
		ChemA
		Chlordane
		DDT
		Dieldrin
		Endosulfan
		Hexachlorocyclohexane
		Nitrate as Nitrate (NO3)
		Nitrogen, Nitrate
		Polychlorinated biphenyls
		Toxaphene
	Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2 on 1998 303d list)	
		Ammonia
		ChemA
		DDT
		Endosulfan
		Toxaphene
		Toxicity
	Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo Crk Reaches 2 & 3, and lower Conejo Crk/Arroyo Conejo N Fk on 1998 303d list)	
		ChemA
		DDT
		Endosulfan
		Nitrogen, Nitrite
		Toxaphene
		Toxicity
	Calleguas Creek Reach 11 (Arroyo Santa Rosa, was part of Conejo Creek Reach 3 on 1998 303d list)	
		Ammonia
		ChemA
		DDT
		Endosulfan
		Sedimentation/Siltation
		Toxaphene
		Toxicity
	Calleguas Creek Reach 12 (was Conejo Creek/Arroyo Conejo North Fork on 1998 303d list)	

Region	Water Segment	Pollutant
		Ammonia
		Chlordane
		DDT
	Calleguas Creek Reach 13 (Conejo Creek South Fork, was Conejo Cr Reach 4 and part of Reach 3 on 1998 303d list)	
		Ammonia
		ChemA
		DDT
		Endosulfan
		Toxaphene
		Toxicity
	Carbon Beach	
		Indicator Bacteria
	Castlerock Beach	
		Indicator Bacteria
	Compton Creek	
		Copper
		Lead
		pH
	Coyote Creek	
		Ammonia
	Dan Blocker Memorial (Coral) Beach	
		Coliform Bacteria
	Dockweiler Beach	
		Indicator Bacteria
	Dry Canyon Creek	
		Selenium
	Duck Pond Agricultural Drains/Mugu Drain/Oxnard Drain No 2	
		ChemA
		Chlordane
		DDT
		Nitrogen
		Sediment Toxicity
		Toxaphene
		Toxicity
	Escondido Beach	
		Indicator Bacteria
	Flat Rock Point Beach Area	
		Indicator Bacteria
	Fox Barranca (tributary to Calleguas Creek Reach 6)	
		Nitrate and Nitrite
	Hermosa Beach	
		Indicator Bacteria
	Inspiration Point Beach	
		Indicator Bacteria
	La Costa Beach	
		Indicator Bacteria
	Las Flores Beach	
		Coliform Bacteria
	Las Tunas Beach	
		Indicator Bacteria

Region	Water Segment	Pollutant
	Leo Carillo Beach (South of County Line)	
		Coliform Bacteria
	Long Point Beach	
		Coliform Bacteria
	Los Angeles Harbor - Inner Cabrillo Beach Area	
		Indicator Bacteria
	Los Angeles River Reach 1 (Estuary to Carson Street)	
		Aluminum
		Ammonia
		Copper
		Lead
		Nutrients (Algae)
		Zinc
		pH
	Los Angeles River Reach 2 (Carson to Figueroa Street)	
		Ammonia
		Lead
		Nutrients (Algae)
	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	
		Ammonia
		Nutrients (Algae)
	Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)	
		Ammonia
		Lead
		Nutrients
	Los Angeles River Reach 5 (within Sepulveda Basin)	
		Ammonia
		Nutrients (Algae)
	Lunada Bay Beach	
		Indicator Bacteria
	Malaga Cove Beach	
		Indicator Bacteria
	Malibu Beach	
		Indicator Bacteria
	Malibu Lagoon Beach (Surfrider)	
		Coliform Bacteria
	Manhattan Beach	
		Indicator Bacteria
	Marina del Rey Harbor - Back Basins	
		Chlordane
		Copper
		DDT
		Dieldrin
		Fish Consumption Advisory
		Indicator Bacteria
		Lead
		Polychlorinated biphenyls
		Sediment Toxicity

Region	Water Segment	Pollutant
		Zinc
	Marina del Rey Harbor Beach	
		Indicator Bacteria
	McCoy Canyon Creek	
		Selenium
	McGrath Beach	
		Coliform Bacteria
	Mint Canyon Creek Reach 1 (Confl to Rowler Cyn)	
		Nitrate and Nitrite
	Monrovia Canyon Creek	
		Lead
	Nicholas Canyon Beach	
		Indicator Bacteria
	Palo Verde Shoreline Park Beach	
		Pathogens
	Paradise Cove Beach	
		Fecal Coliform
	Peninsula Beach	
		Indicator Bacteria
	Point Dume Beach	
		Indicator Bacteria
	Point Fermin Park Beach	
		Total Coliform
	Point Vicente Beach	
		Indicator Bacteria
	Portuguese Bend Beach	
		Indicator Bacteria
	Promenade Park Beach	
		Indicator Bacteria
	Puerco Beach	
		Indicator Bacteria
	Redondo Beach	
		Coliform Bacteria
	Resort Point Beach	
		Indicator Bacteria
	Rincon Beach	
		Indicator Bacteria
	Rio Hondo Reach 1 (Confl. LA River to Snt Ana Fwy)	
		Copper Lead Zinc pH
	Royal Palms Beach	
		Indicator Bacteria
	San Gabriel River, East Fork	
		Trash
	San Jose Creek Reach 1 (SG Confluence to Temple St.)	
		Ammonia
	Santa Clara River Reach 3 (Freeman Diversion to A Street)	
		Ammonia

Region	Water Segment	Pollutant
	Santa Clara River Reach 5 (Blue Cut gaging station to West Pier Hwy 99 Bridge) (was named Santa Clara River Reach 7 on 2002 303(d) lists)	Chloride
	Santa Clara River Reach 6 (W Pier Hwy 99 to Bouquet Cyn Rd) (was named Santa Clara River Reach 8 on 2002 303(d) lists)	Chloride
	Santa Clara River Reach 7 (Bouquet Canyon Rd to above Lang Gaging Station) (was named Santa Clara River Reach 9 on 2002 303(d) lists)	Chloride
	Santa Monica Beach	Chloride Nitrate and Nitrite
	Santa Monica Canyon	Indicator Bacteria
	Sea Level Beach	Indicator Bacteria
	Sepulveda Canyon	Indicator Bacteria
	Surfers Point at Seaside	Indicator Bacteria
	Topanga Beach	Indicator Bacteria
	Torrance Beach	Coliform Bacteria
	Torrey Canyon Creek	Coliform Bacteria
	Trancas Beach (Broad Beach)	Nitrate and Nitrite
	Tujunga Wash (LA River to Hansen Dam)	Fecal Coliform
	Venice Beach	Ammonia Copper
	Wheeler Canyon/Todd Barranca	Indicator Bacteria
	Whites Point Beach	Nitrate and Nitrite
	Will Rogers Beach	Indicator Bacteria
	Zuma Beach (Westward Beach)	Indicator Bacteria
5	Arcade Creek	Chlorpyrifos Diazinon
	Bear Creek	Mercury
	Cache Creek, Lower (Clear Lake Dam to	

Region	Water Segment	Pollutant
	Cache Creek Settling Basin near Yolo Bypass)	Mercury
	Calaveras River, Lower	Diazinon
	Chicken Ranch Slough	Chlorpyrifos Diazinon
	Clear Lake	Mercury
	Delta Waterways (Stockton Ship Channel)	Chlorpyrifos Diazinon Oxygen, Dissolved
	Delta Waterways (eastern portion)	Chlorpyrifos Diazinon
	Delta Waterways (western portion)	Chlorpyrifos Diazinon
	Elder Creek	Chlorpyrifos Diazinon
	Elk Grove Creek	Diazinon
	Five Mile Slough (Alexandria Place to Fourteen Mile Slough)	Chlorpyrifos Diazinon
	Grasslands Marshes	Selenium
	Harley Gulch	Mercury
	Mendota Pool	Selenium
	Mosher Slough (downstream of I-5)	Chlorpyrifos Diazinon
	Mud Slough	Selenium
	Sacramento River (Keswick Dam to Cottonwood Creek)	Cadmium Copper Zinc
	San Joaquin River (Bear Creek to Mud Slough)	Chlorpyrifos Diazinon
	San Joaquin River (Mendota Pool to Bear Creek)	Chlorpyrifos Diazinon
	San Joaquin River (Merced River to Tuolumne River)	Chlorpyrifos

Region	Water Segment	Pollutant
		Diazinon
		Selenium
	San Joaquin River (Mud Slough to Merced River)	
		Chlorpyrifos
		Diazinon
		Selenium
	San Joaquin River (Stanislaus River to Delta Boundary)	
		Chlorpyrifos
		Diazinon
		Selenium
	San Joaquin River (Tuolumne River to Stanislaus River)	
		Chlorpyrifos
		Diazinon
		Selenium
	Smith Canal	
		Organophosphorus Pesticides
	Strong Ranch Slough	
		Chlorpyrifos
		Diazinon
	Sulphur Creek (Colusa County)	
		Mercury
6		
	Aspen Creek	
		Metals
	Bryant Creek	
		Metals
	Heavenly Valley Creek (source to USFS boundary)	
		Sedimentation/Siltation
	Indian Creek Reservoir	
		Phosphorus
	Leviathan Creek	
		Metals
	Mono Lake	
		Salinity/TDS/Chlorides
	Searles Lake	
		Petroleum Products
		Salinity/TDS/Chlorides
7		
	Alamo River	
		Sedimentation/Siltation
		Selenium
	Imperial Valley Drains	
		Sedimentation/Siltation
	New River (Imperial)	
		Pathogens
		Sediment
8		
	Canyon Lake (Railroad Canyon Reservoir)	
		Nutrients
	Chino Creek Reach 1	

Region	Water Segment	Pollutant
		Pathogens
	Chino Creek Reach 2	
		Coliform Bacteria
	Cucamonga Creek, Valley Reach	
		Coliform Bacteria
	Elsinore, Lake	
		Nutrients
		Organic Enrichment/Low Dissolved Oxygen
	Knickerbocker Creek	
		Pathogens
	Mill Creek (Prado Area)	
		Pathogens
	Newport Bay, Lower	
		Nutrients
		Pathogens
		Pesticides
	Newport Bay, Upper (Ecological Reserve)	
		Nutrients
		Pathogens
		Pesticides
		Sedimentation/Siltation
	Prado Park Lake	
		Pathogens
	San Diego Creek Reach 1	
		Nutrients
		Pesticides
		Sedimentation/Siltation
	San Diego Creek Reach 2	
		Nutrients
		Sedimentation/Siltation
		Unknown Toxicity
	Santa Ana River, Reach 3	
		Pathogens
9		
	Chollas Creek	
		Diazinon
	Rainbow Creek	
		Nitrogen
		Phosphorus
	San Diego Bay, Shelter Island Yacht Basin	
		Copper

TABLE 9~~7~~: DELETIONS FROM THE SECTION 303(D) LIST.

Region	Water Segment	Pollutant
1		
	Klamath River HU, Lost River HA, Clear Lake, Boles HSAs	
		Nutrients
		Temperature, water
	Klamath River HU, Lost River HA, Tule Lake and Mt Dome HSAs	
		Temperature, water
	Klamath River HU, Salmon River HA	
		Nutrients
	Russian River HU, Lower Russian River HA, Guerneville HSA	
		Turbidity
	~~Russian River HU, Middle Russian River HA, Laguna de Santa Rosa~~	
		~~Nitrogen~~
		~~Phosphorus~~
2		
	Carquinez Strait	
		Diazinon
	Central Basin, San Francisco (part of SF Bay, Central)	
		Diazinon
	Islais Creek	
		Endosulfan sulfate
		Polychlorinated biphenyls
	Mission Creek	
		Chlorpyrifos
		Chromium (total)
		Copper
		Mirex
	Oakland Inner Harbor (Fruitvale Site, part of SF Bay, Central)	
		Diazinon
	Oakland Inner Harbor (Pacific Dry-dock Yard 1 Site, part of SF Bay, Central)	
		Chlorpyrifos
		Diazinon
		Mirex
		Tributylin TBT (Tributylstanne)
		ppDDE
	Sacramento San Joaquin Delta	
		Diazinon
	San Francisco Bay, Central	
		Diazinon
	San Francisco Bay, Lower	
		Diazinon
	San Francisco Bay, South	
		Diazinon
	San Leandro Bay (part of SF Bay, Central)	
		DDT

Region	Water Segment	Pollutant
		Diazinon
		Selenium
	San Pablo Bay	
		Diazinon
	Suisun Bay	
		Diazinon
3		
	Blosser Channel	
		Fecal Coliform
	Carpinteria Marsh (El Estero Marsh)	
		Sedimentation/Siltation
	Chumash Creek	
		Oxygen, Dissolved
	Espinosa Slough	
		Nutrients
	Goleta Slough/Estuary	
		Metals
		Sedimentation/Siltation
	Monterey Bay South (Coastline)	
		Metals
		Pesticides
	Morro Bay	
		Metals
	Salinas Reclamation Canal	
		Nitrogen, Nitrate
	Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)	
		Sedimentation/Siltation
	Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)	
		Sedimentation/Siltation
	Salinas River Lagoon (North)	
		Sedimentation/Siltation
	Salinas River Refuge Lagoon (South)	
		Nutrients
		Pesticides
		Salinity/TDS/Chlorides
	San Antonio Creek (South Coast Watershed)	
		Sedimentation/Siltation
	San Luis Obispo Creek (Below W Marsh Street)	
		Priority Organics
	Waddell Creek, East Branch	
		Nutrients
	Watsonville Slough	
		Sedimentation/Siltation
4		
	~~Abalone Cove Beach~~	
		~~Beach Closures~~
	Arroyo Seco Reach 1 (LA River to West Holly Ave.)	
		Excess Algal Growth
	Arroyo Seco Reach 2 (Figueroa St. to Riverside Dr.)	
		Excess Algal Growth

Region	Water Segment	Pollutant
	Ashland Avenue Drain	Coliform Bacteria Organic Enrichment/Low Dissolved Oxygen Toxicity
	Ballona Creek	~~Cadmium~~ ChemA Chlordane DDT Dieldrin Lead PCBs (dioxin-like) Sediment Toxicity ~~Bioassays for Estuarine and Marine Water~~ Selenium ~~Silver~~ Zinc pH
	Bluff Cove Beach	Beach Closures
	Burbank Western Channel	Ammonia Cadmium Excess Algal Growth Scum/Foam-unnatural ~~Foam/Flocs/Scum/Oil Slicks~~ Taste and odor
	Calleguas Creek Reach 1 (was Mugu Lagoon on 1998 303(d) list)	Zinc
	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on 1998 303d list)	Excess Algal Growth
	Calleguas Creek Reach 5 (was Beardsley Channel on 1998 303d list)	Excess Algal Growth
	Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998 303d list)	Excess Algal Growth Nitrogen, Nitrite
	Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2 on 1998 303d list)	Excess Algal Growth
	Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo Crk Reaches 2 & 3, and lower Conejo Crk/Arroyo Conejo N Fk on 1998 303d list)	Excess Algal Growth
	Calleguas Creek Reach 11 (Arroyo Santa Rosa, was part of Conejo Creek Reach 3 on 1998 303d list)	Excess Algal Growth
	Calleguas Creek Reach 13 (Conejo Creek South	

Region	Water Segment	Pollutant
	Fork, was Conejo Cr Reach 4 and part of Reach 3 on 1998 303d list)	
		Excess Algal Growth
	Carbon Beach	
		Beach Closures
	Coyote Creek	
		Abnormal Fish Histology (Lesions)
		Excess Algal Growth
		Lead
		Selenium
		Zinc
	Dockweiler Beach	
		Beach Closures
	~~Dominguez Channel (lined portion above Vermont Ave)~~	
		~~Aldrin~~
		~~ChemA~~
		~~Chlordane~~
		~~DDT~~
		~~Dieldrin~~
	Dominguez Channel Estuary (unlined portion below Vermont Ave)	
		~~Aldrin~~
		~~ChemA~~
		~~Chlordane~~
		Chromium (total)
		~~DDT~~
		~~Dieldrin~~
		Polycyclic Aromatic Hydrocarbons (PAHs) (Aquatic Ecosystems)
	Escondido Beach	
		Beach Closures
	Flat Rock Point Beach Area	
		Beach Closures
	~~Hermosa Beach~~	
		~~Beach Closures~~
	Inspiration Point Beach	
		Beach Closures
	La Costa Beach	
		Beach Closures
	Las Tunas Beach	
		Beach Closures
	Los Angeles Harbor - Consolidated Slip	
		~~Dieldrin~~
		Nickel
		Polycyclic Aromatic Hydrocarbons (PAHs) (Aquatic Ecosystems)
	Los Angeles Harbor - Inner Cabrillo Beach Area	
		Beach Closures
	~~Los Angeles River Estuary (Queensway Bay)~~	
		~~DDT~~
	Los Angeles River Reach 1 (Estuary to Carson Street)	
		Cadmium

Region	Water Segment	Pollutant
		Scum/Foam-unnatural
	Los Angeles River Reach 2 (Carson to Figueroa Street)	
		Scum/Foam-unnatural ~~Foam/Flocs/Scum/Oil Slicks~~ ~~Nutrients (Algae)~~ Taste and odor
	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	
		Scum/Foam-unnatural Taste and odor
	Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)	
		Scum/Foam-unnatural Taste and odor
	Los Angeles River Reach 5 (within Sepulveda Basin)	
		Scum/Foam-unnatural Taste and odor
	Los Angeles/Long Beach Inner Harbor	
		Copper Polycyclic Aromatic Hydrocarbons (PAHs) Zinc
	Los Angeles/Long Beach Outer Harbor (inside breakwater)	
		Polychlorinated biphenyls
	Lunada Bay Beach	
		Beach Closures
	~~Malaga Cove Beach~~	
		~~Beach Closures~~
	~~Malibu Beach~~	
		~~Beach Closures~~
	Malibu Lagoon Beach (Surfrider)	
		Beach Closures
	~~Manhattan Beach~~	
		~~Beach Closures~~
	~~Nicholas Canyon Beach~~	
		~~Beach Closures~~
	Ormond Beach	
		Bacteria Indicators
	Pico Kenter Drain	
		Ammonia Coliform Bacteria Copper Lead Polycyclic Aromatic Hydrocarbons (PAHs) Toxicity Trash Viruses (enteric)
	Point Dume Beach	
		Beach Closures
	~~Point Fermin Park Beach~~	
		~~Beach Closures~~
	Point Vicente Beach	

Region	Water Segment	Pollutant
		Beach Closures
	~~Portuguese Bend Beach~~	~~Beach Closures~~
	~~Puerco Beach~~	~~Beach Closures~~
	Resort Point Beach	Beach Closures
	Rocky Point Beach	Beach Closures
	~~Royal Palms Beach~~	~~Beach Closures~~
	San Buenaventura Beach	Bacteria Indicators
	San Gabriel River Estuary	Abnormal Fish Histology (Lesions)
	San Gabriel River Reach 1 (Estuary to Firestone)	Abnormal Fish Histology (Lesions) Excess Algal Growth Toxicity
	San Gabriel River Reach 2 (Firestone to Whittier Narrows Dam	~~Lead~~ Copper Zinc
	San Gabriel River Reach 3 (Whittier Narrows to Ramona)	Toxicity
	San Jose Creek Reach 1 (SG Confluence to Temple St.)	Excess Algal Growth
	San Jose Creek Reach 2 (Temple to I-10 at White Ave.)	Excess Algal Growth
	Santa Clara River Reach 5 (Blue Cut gaging station to West Pier Hwy 99 Bridge) (was named Santa Clara River Reach 7 on 2002 303(d) lists)	Nitrate and Nitrite
	Santa Monica Bay Offshore/Nearshore	Chlordane Polycyclic Aromatic Hydrocarbons (PAHs)
	Sea Level Beach	Beach Closures
	Topanga Beach	Beach Closures
	Torrance Beach	Beach Closures
	Trancas Beach (Broad Beach)	Beach Closures
	Tujunga Wash (LA River to Hansen Dam)	Scum/Foam-unnatural ~~Foam/Flocs/Scum/Oil Slicks~~ Taste and odor
	~~Venice Beach~~	~~Beach Closures~~
	Ventura River Estuary	

Region	Water Segment	Pollutant
	Verdugo Wash Reach 1 (LA River to Verdugo Rd.)	Fecal Coliform
	Verdugo Wash Reach 2 (Above Verdugo Road)	Excess Algal Growth
	~~Whites Point Beach~~	Excess Algal Growth
	~~Will Rogers Beach~~	~~Beach Closures~~
	Zuma Beach (Westward Beach)	~~Beach Closures~~
5		Beach Closures
	Feather River, Lower (Lake Oroville Dam to Confluence with Sacramento River)	
	Harding Drain (Turlock Irrigation District Lateral #5)	Diazinon
	Morrison Creek	Ammonia Diazinon
	Sacramento River (Knights Landing to the Delta)	Diazinon
	Sacramento Slough	Diazinon
	Sutter Bypass	Diazinon
6		Diazinon
	Aurora Canyon Creek	
	Bear Creek (Placer County)	Habitat alterations
	Bodie Creek	Sedimentation/Siltation
	Cinder Cone Springs	Metals
	Clark Canyon Creek	Nitrate as Nitrate (NO3) Salinity/TDS/Chlorides
	Cottonwood Creek (below LADWP diversion)	Habitat alterations
	Crowley Lake	Flow alterations
	Goodale Creek	Nitrogen Phosphorus
	Green Creek	Sedimentation/Siltation
	Green Valley Lake Creek	Habitat alterations
	Honey Lake Wildfowl Management Ponds	Priority Organics
	Horseshoe Lake (San Bernardino County)	Flow alterations
		Sedimentation/Siltation

Region	Water Segment	Pollutant
	Indian Creek (Alpine County)	Habitat alterations
	Lassen Creek	Flow alterations
	Lee Vining Creek	Flow alterations
	Mill Creek (Modoc County)	Sedimentation/Siltation
	Mill Creek (Mono County)	Flow alterations
	Owens River (Long HA)	Habitat alterations
	Owens River (Lower)	Habitat alterations
	Owens River (Upper)	Habitat alterations
	Pine Creek (Lassen County)	Sedimentation/Siltation
	Rough Creek	Habitat alterations
	Skedaddle Creek	Coliform Bacteria
	Tinemaha Reservoir	Copper
	Topaz Lake	Sedimentation/Siltation
	Tuttle Creek	Habitat alterations
	West Walker River	Sedimentation/Siltation
7	Palo Verde Outfall Drain	Pathogens
8	Elsinore, Lake	Sedimentation/Siltation
	Huntington Harbour	Dieldrin
	Newport Bay, Lower	Metals Priority Organics
9	Chollas Creek	Cadmium
	Mission Bay Shoreline	Bacteria Indicators
	Pacific Ocean Shoreline, Miramar Reservoir HA	Bacteria Indicators
	Pacific Ocean Shoreline, Scripps HA	Bacteria Indicators
	San Diego Bay Shoreline, Chula Vista Marina	Bacteria Indicators

TABLE 108: AFFECTED AREA CHANGES IN THE SECTION 303(D) LIST.

Region	Water Segment
2	
	San Francisco Bay, Lower
	San Francisco Bay, South
3	
	Alamo Creek
	Los Osos Creek
	Orcutt Creek
	Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)
	Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)
	Pacific Ocean at Jalama Beach (Santa Barbara County)
	Rider Creek
	Salinas Reclamation Canal
4	
	Dominguez Channel (lined portion above Vermont Ave)
	Dominguez Channel Estuary (unlined portion below Vermont Ave)
	Los Angeles Harbor - Cabrillo Marina
	Los Angeles Harbor - Consolidated Slip
	Los Angeles Harbor - Fish Harbor
	Los Angeles Harbor - Inner Cabrillo Beach Area
	Los Angeles/Long Beach Inner Harbor
	Los Angeles/Long Beach Outer Harbor (inside breakwater)
	San Pedro Bay Near/Off Shore Zones
5	
	Delta Waterways (Stockton Ship Channel)
	Delta Waterways (eastern portion)
	Delta Waterways (western portion)
	Ingram Creek (from confluence with Hospital Creek to Hwy 33 crossing)

Region	Water Segment
	Ingram Creek (from confluence with San Joaquin River to confluence with Hospital Creek)
	Marsh Creek (Dunn Creek to Marsh Creek Reservoir)
	Marsh Creek (Marsh Creek Reservoir to San Joaquin River)
	~~Salt Slough (upstream from confluence with San Joaquin River)~~
	San Joaquin River (Merced River to Tuolumne River)
	San Joaquin River (Stanislaus River to Delta Boundary)
	San Joaquin River (Tuolumne River to Stanislaus River)
	Stockton Deep Water Channel, Upper (Port Turning Basin)
9	
	Chollas Creek
	Green Valley Creek
	Kit Carson Creek
	Mission Bay Shoreline
	Pacific Ocean Shoreline, San Diego HU
	Pacific Ocean Shoreline, Scripps HA
	San Diego River (Lower)
	Santa Margarita River (Upper)
	Tijuana River

TABLE 11~~9~~: SCHEDULES FOR COMPLETION OF TOTAL MAXIMUM DAILY LOADS.

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
1	Albion River Sediment	Albion River, Mendocino Coast HU, Albion River HA	Sedimentation/Siltation	2004
	Big River Sediment	Big River, Mendocino Coast HU, Big River HA	Sedimentation/Siltation	2004
	Eel River South Fork Sediment	Eel River, South Fork, Eel River HU, South Fork HA	Sedimentation/Siltation	2004
	Eel River, Middle Fork Sediment	Eel River, Middle Fork, Eel River HU, North Fork HA	Sedimentation/Siltation	2004
	Eel River, North Fork Sediment	Eel River, North Fork, Eel River HU, North Fork HA	Sedimentation/Siltation	2004
	Gualala River Sediment	Gualala River, Mendocino Coast HU, Gualala River HA	Sedimentation/Siltation	2004
	Klamath River	Klamath River, Klamath River HU, Lower HA, Klamath Glen HSA	Nutrients	2006
			Organic Enrichment/Low Dissolved Oxygen	2006
			Temperature	2006
		Klamath River, Klamath River HU, Middle HA, Iron Gate Dam to Scott River	Nutrients	2006
			Organic Enrichment/Low Dissolved Oxygen	2006
			Temperature	2006
		Klamath River, Klamath River HU, Middle HA, Oregon to Iron Gate	Nutrients	2006
			Organic Enrichment/Low Dissolved Oxygen	2006
			Temperature	2006
		Klamath River, Klamath River HU, Middle HA, Scott River to Trinity River	Nutrients	2006
			Organic	2006

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
			Enrichment/Low Dissolved Oxygen	
			Temperature	2006
	Laguna de Santa Rosa TMDL	Laguna de Santa Rosa, Russian River HU, Middle Russian River HA	Low Dissolved Oxygen	2008
			Temperature	2008
	Lower Lost River	Klamath River, Klamath River HU, Lost River HA, Tule Lake and Mt Dome HSAs	Nutrients	2006
			Temperature	2006
		Tule Lake and Lower Klamath Lake National Wildlife Refuge (Klamath River HU)	pH (high)	2006
	Mattole Sediment	Mattole River, Cape Mendocino HU, Mattole River HA	Sedimentation/Siltation	2004
	Middle Fork Eel River	Eel River, Middle Fork, Eel River HU, Middle Fork HA	Sedimentation/Siltation	2007
	Navarro River Sediment	Navarro River Delta, Mendocino Coast HU, Navarro River HA	Sedimentation/Siltation	2004
		Navarro River, Mendocino Coast HU	Sedimentation/Siltation	2004
	Noyo River Sediment	Noyo River, Mendocino Coast HU, Noyo River HA	Sedimentation/Siltation	2004
	Redwood Creek	Redwood Creek, Redwood Creek HU	Sedimentation/Siltation	2004
	Russian River Pathogens	Russian River, Russian River HU, Lower Russian River HA, Guerneville HSA	Pathogens	2008
	Salmon River	Klamath River, Klamath River HU, Salmon River HA	Temperature	2005
	Santa Rosa Creek Pathogens	Santa Rosa Creek, Russian River HU, Middle Russian River HA	Pathogens	2008
	Scott River	Scott River, Klamath River HU, Scott River HA	Sedimentation/Siltation	2005
			Temperature	2005

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
	Shasta River	Shasta River, Klamath River HU, Shasta River HA	Organic Enrichment/Low Dissolved Oxygen	2006
			Temperature	2006
	Ten Mile Sediment	Ten Mile River, Mendocino Coast HU, Rockport HA, Ten Mile River HSA	Sedimentation/Siltation	2004
	Trinity River Sediment	Trinity River, East Fork, Trinity River HU, Upper HA	Sedimentation/Siltation	2004
		Trinity River, South Fork, Trinity River HU, South Fork HA	Sedimentation/Siltation	2004
		Trinity River, Trinity River HU, Lower Trinity HA	Sedimentation/Siltation	2004
		Trinity River, Trinity River HU, Middle HA	Sedimentation/Siltation	2004
		Trinity River, Trinity River HU, Upper HA	Sedimentation/Siltation	2004
	Upper Lost River	Klamath River, Klamath River HU, Lost River HA, Clear Lake, Boles HSAs	Nutrients	2004
			Temperature	2004
	Van Duzen River Sediment	Van Duzen River, Eel River HU, Van Duzen River HA	Sedimentation/Siltation	2004
2	Guadalupe River Watershed Mercury	Alamitos Creek	Mercury	2006
		Calero Reservoir	Mercury	2006
		Guadalupe Creek	Mercury	2006
		Guadalupe Reservoir	Mercury	2006
		Guadalupe River	Mercury	2006
	Lagunitas Creek Sediment	Lagunitas Creek	Sedimentation/Siltation	2009
	Napa River Nutrients	Napa River	Nutrients	~~2007~~2008
	Napa River Pathogens	Napa River	Pathogens	2006
	Napa River Sediment	Napa River	Sedimentation/Siltation	2006
	San Francisco Bay Legacy Pesticides	Carquinez Strait	Chlordane	2008
			DDT	2008
			Dieldrin	2008
		Castro Cove, Richmond (San Pablo Basin)	Dieldrin (sediment)	2008
		Central Basin, San Francisco (part of SF Bay, Central)	Chlordane	2008

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
			DDT	2008
			Dieldrin	2008
		Islais Creek	Chlordane (sediment)	2008
			Dieldrin (sediment)	2008
		Mission Creek	Chlordane (sediment)	2008
			Dieldrin (sediment)	2008
		Oakland Inner Harbor (Fruitvale Site, part of SF Bay, Central)	Chlordane	2008
			Chlordane (sediment)	2008
			DDT	2008
			Dieldrin	2008
		Oakland Inner Harbor (Pacific Dry-dock Yard 1 Site, part of SF Bay, Central)	Chlordane	2008
			Chlordane (sediment)	2008
			DDT	2008
			Dieldrin	2008
			Dieldrin (sediment)	2008
		Richardson Bay	Chlordane	2008
			DDT	2008
			Dieldrin	2008
		Sacramento San Joaquin Delta	Chlordane	2008
			DDT	2008
			Dieldrin	2008
		San Francisco Bay, Central	Chlordane	2008
			DDT	2008
			Dieldrin	2008
		San Francisco Bay, Lower	Chlordane	2008
			DDT	2008
			Dieldrin	2008
		San Francisco Bay, South	Chlordane	2008
			DDT	2008
			Dieldrin	2008
		San Leandro Bay (part of SF Bay, Central)	Chlordane	2008
			Dieldrin	2008
		San Pablo Bay	Chlordane	2008
			DDT	2008
			Dieldrin	2008

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
		Suisun Bay	Chlordane	2008
			DDT	2008
			Dieldrin	2008
	San Francisco Bay Mercury	Carquinez Strait	Mercury	2006
		Castro Cove, Richmond (San Pablo Basin)	Mercury (sediment)	2006
		Central Basin, San Francisco (part of SF Bay, Central)	Mercury	2006
			Mercury (sediment)	2006
		Oakland Inner Harbor (Fruitvale Site, part of SF Bay, Central)	Mercury	2006
		Oakland Inner Harbor (Pacific Dry-dock Yard 1 Site, part of SF Bay, Central)	Mercury	2006
			Mercury (sediment)	2006
		Richardson Bay	Mercury	2006
		Sacramento San Joaquin Delta	Mercury	2006
		San Francisco Bay, Central	Mercury	2006
		San Francisco Bay, Lower	Mercury	2006
		San Francisco Bay, South	Mercury	2006
		San Leandro Bay (part of SF Bay, Central)	Mercury	2006
			Mercury (sediment)	2006
		San Pablo Bay	Mercury	2006
		Suisun Bay	Mercury	2006
	San Francisco Bay PCBs	Carquinez Strait	PCBs	2006
		Central Basin, San Francisco (part of SF Bay, Central)	PCBs	2006
		Islais Creek	PCBs (sediment)	2006
		Mission Creek	PCBs (sediment)	2006
		Oakland Inner Harbor (Fruitvale Site, part of SF Bay, Central)	PCBs	2006
			PCBs (sediment)	2006
		Oakland Inner Harbor (Pacific Dry-dock Yard 1 Site, part of SF Bay, Central)	PCBs	2006
			PCBs (sediment)	2006

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
		Richardson Bay	PCBs	2006
		Sacramento San Joaquin Delta	PCBs	2006
		San Francisco Bay, Central	PCBs	2006
		San Francisco Bay, Lower	PCBs	2006
		San Francisco Bay, South	PCBs	2006
		San Pablo Bay	PCBs	2006
		Suisun Bay	PCBs	2006
	San Francisco Bay Urban Creeks Diazinon	Alameda Creek	Diazinon	2005
		Arroyo Corte Madera Del Presidio	Diazinon	2005
		Arroyo De La Laguna	Diazinon	2005
		Arroyo Del Valle	Diazinon	2005
		Arroyo Las Positas	Diazinon	2005
		Arroyo Mocho	Diazinon	2005
		Calabazas Creek	Diazinon	2005
		Corte Madera Creek	Diazinon	2005
		Coyote Creek (Marin County)	Diazinon	2005
		Coyote Creek (Santa Clara Co.)	Diazinon	2005
		Gallinas Creek	Diazinon	2005
		Guadalupe River	Diazinon	2005
		Laurel Creek (Solano Co)	Diazinon	2005
		Ledgewood Creek	Diazinon	2005
		Los Gatos Creek (R2)	Diazinon	2005
		Matadero Creek	Diazinon	2005
		Miller Creek	Diazinon	2005
		Mt. Diablo Creek	Diazinon	2005
		Novato Creek	Diazinon	2005
		Permanente Creek	Diazinon	2005
		Petaluma River	Diazinon	2005
		Pine Creek (Contra Costa Co)	Diazinon	2005
		Pinole Creek	Diazinon	2005
		Rodeo Creek	Diazinon	2005
		San Antonio Creek (Marin/Sonoma Co)	Diazinon	2005
		San Felipe Creek	Diazinon	2005
		San Francisquito Creek	Diazinon	2005
		San Leandro Creek,	Diazinon	2005

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
		Lower San Lorenzo Creek	Diazinon	2005
		San Mateo Creek	Diazinon	2005
		San Pablo Creek	Diazinon	2005
		San Rafael Creek	Diazinon	2005
		Saratoga Creek	Diazinon	2005
		Stevens Creek	Diazinon	2005
		Suisun Slough	Diazinon	2005
		Walnut Creek	Diazinon	2005
		Wildcat Creek	Diazinon	2005
	San Francisquito Creek Watershed	San Francisquito Creek	Sedimentation/Siltation	~~2007~~2008
	Sonoma Creek Nutrients	Sonoma Creek	Nutrients	~~2007~~2008
	Sonoma Creek Pathogens	Sonoma Creek	Pathogens	2006
	Sonoma Creek Sediment	Sonoma Creek	Sedimentation/Siltation	2008
	Tomales Bay Mercury	Tomales Bay	Mercury	~~2007~~2009
	Tomales Bay Pathogens	Lagunitas Creek	Pathogens	2005
		Tomales Bay	Pathogens	2005
	Tomales Bay Sediment	Tomales Bay	Sedimentation/Siltation	~~2008~~2010
	Walker Creek Mercury	Walker Creek	Mercury	2006
	Walker Creek Sediment	Walker Creek	Sedimentation/Siltation	2009
3	Aptos/Valencia Creeks Pathogen TMDL	Aptos Creek	Pathogens	2006
		Valencia Creek	Pathogens	2006
	Aptos/Valencia Sediment	Aptos Creek	Sedimentation/Siltation	200~~6~~ 2006
		Valencia Creek	Sedimentation/Siltation	200~~6~~ 2006
	Carbonera Creek - Pathogen - Santa Cruz Co.	Carbonera Creek	Pathogens	2006
	~~Carpinteria Marsh and Goleta Slough, multiple pollutant listing~~	~~Carpinteria Marsh (El Estero Marsh)~~	~~Nutrients~~	~~2015~~
			~~Organic Enrichment/Low Dissolved Oxygen~~	~~2015~~
			~~Priority Organics~~	~~2015~~
		~~Goleta Slough/Estuary~~		
			~~Pathogens~~	~~2015~~
			~~Priority Organics~~	~~2015~~
	Chorro Creek Nutrients	Chorro Creek	Nutrients	2005
	Clear Creek -Hernandez Reservoir - Mercury	Clear Creek (San Benito County)	Mercury	2004
		Hernandez Reservoir	Mercury	2004
	Corralitos Creek Pathogens	Corralitos Creek	Fecal Coliform	2006

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
	Dairy Creek Dissolved Oxygen	Dairy Creek	Low Dissolved Oxygen	2015
	Elkhorn Slough Pathogens TMDL	Elkhorn Slough	Pathogens	2015
	Elkhorn Slough Sediment TMDL	Elkhorn Slough	Sediment	2015
	Los Osos Creek Dissolved Oxygen	Los Osos Creek	Low Dissolved Oxygen	2015
	Los Osos Creek Nutrients	Los Osos Creek	Nutrients	2015
	Monterey Harbor -Lead			
		Monterey Harbor	Metals	2007
	Morro Bay Pathogens TMDL	Chorro Creek	Fecal Coliform	2002
		Chumash Creek	Fecal Coliform	2002
		Dairy Creek	Fecal Coliform	2002
		Los Osos Creek	Fecal Coliform	2002
		Morro Bay	Pathogens	2002
		Pennington Creek	Fecal Coliform	2002
		San Bernardo Creek	Fecal Coliform	2002
		San Luisito Creek	Fecal Coliform	2002
		Walters Creek	Fecal Coliform	2002
		Warden Creek	Fecal Coliform	2002
	Morro Bay Sediment TMDL	Chorro Creek	Sedimentation/Siltation	2003
		Los Osos Creek	Sedimentation/Siltation	2003
		Morro Bay	Sedimentation/Siltation	2003
	~~Multiple Listings Llagas Creek (Pajaro R. Fecal coliform)~~	~~Llagas Creek~~	~~Chloride~~	~~2011~~
			~~Low Dissolved Oxygen~~	~~2011~~
			~~Sodium~~	~~2011~~
			~~Total Dissolved Solids~~	~~2011~~
			~~pH~~	~~2011~~
	Pajaro River Fecal Coliform TMDL	Llagas Creek	Fecal Coliform	2011
		Tesquisquita Creek (Make this bold and italicize. Do not underline)	Fecal Coliform (Make this bold and italicize. Do not underline.)	2011
		Pajaro River	Fecal Coliform	2011
		San Benito River	Fecal Coliform	2011
	Pajaro River Nutrients (including Llagas Creek)	Llagas Creek	Nutrients	2005
		Pajaro River	Nutrients	2005
	Pajaro River Siltation/Sedimentation (including San Benito R., Llagas Cr., Rider Gulch Cr.)	Llagas Creek	Sedimentation/Siltation	2005

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
		Pajaro River	Sedimentation/Siltation	2005
		Rider Gulch Creek	Sedimentation/Siltation	2005
		San Benito River	Sedimentation/Siltation	2005
	Salinas River - Ffecal eColiform	Alisal Creek (Salinas)	Fecal Coliform	2007
		Atascadero Creek (San Luis Obispo County)	Fecal Coliform	20192007
		~~Elkhorn Slough~~	~~Pathogens~~	~~2007~~
		Gabilan Creek	Fecal Coliform	2007
		Old Salinas River Estuary	Fecal Coliform	2007
		Salinas Reclamation Canal	Fecal Coliform	2007
		Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)	Fecal Coliform	2007
		San Lorenzo Creek	Fecal Coliform	20192007
		Tembladero Slough	Fecal Coliform	2007
	Salinas River Nutrient TMDL	Alisal Creek (Salinas)	Nitrate	20076
		Old Salinas River Estuary	Nutrients	20076
		Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)	Nutrients	20076
		Salinas River Lagoon (North)	Nutrients	20076
		Tembladero Slough	Nutrients	2006
	Salinas River, Salinas River Delta and Elkhorn Slough Pesticides	Blanco Drain	Pesticides	20086
		Elkhorn Slough	Pesticides	20086
		Espinosa Slough	Pesticides	20086
			Priority Organics	20086
		Moro Cojo Slough	Pesticides	2006
		Moss Landing Harbor	Pesticides	2006
		Old Salinas River Estuary	Pesticides	20086
		Salinas Reclamation Canal	Pesticides	20086
			Priority Organics	20086
		Salinas River (lower, estuary to near Gonzales Rd crossing,	Pesticides	20086

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
		watersheds 30910 and 30920)		
		Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)	Pesticides	20086
		Salinas River Lagoon (North)	Pesticides	20086
		Tembladero Slough	Pesticides	20086
	~~San Lorenzo River Estuary Pathogen TMDL~~	~~San Lorenzo River Lagoon~~	~~Pathogens~~	~~2006~~
	~~San Lorenzo River and Lompico Creek Bacteria TMDLs~~	~~Lompico Creek~~	~~Pathogens~~	~~2006~~
		~~San Lorenzo River~~	~~Pathogens~~	~~2006~~
	San Luis Obispo Creek Nutrients	San Luis Obispo Creek (Below W Marsh Street)	Nutrients	2004 2005
	San Luis Obispo Creek Pathogen TMDL	San Luis Obispo Creek (Below W Marsh Street)	Pathogens	2004
	~~Santa Cruz County Pathogens~~	~~Aptos Creek~~	~~Pathogens~~	~~2007~~
		~~Carbonera Creek~~	~~Pathogens~~	~~2007~~
		~~Lompico Creek~~	~~Pathogens~~	~~2007~~
		~~San Lorenzo River~~	~~Pathogens~~	~~2007~~
		~~San Lorenzo River Lagoon~~	~~Pathogens~~	~~2007~~
		~~Schwan Lake~~	~~Pathogens~~	~~2007~~
		~~Soquel Lagoon~~	~~Pathogens~~	~~2007~~
		~~Valencia Creek~~	~~Pathogens~~	~~2007~~
	Santa Barbara County Beaches Bacteria TMDL	Arroyo Burro Creek	Pathogens	2015
		Carpinteria Creek	Pathogens	2015
		Goleta Slough/Estuary	Pathogens	2015
		Mission Creek	Pathogens	2015
		Pacific Ocean at Arroyo Burro Beach	Bacteria	2015
		Pacific Ocean at Carpinteria State Beach	Bacteria	2015
		Pacific Ocean at East Beach (Mouth of Mission Creek)	Bacteria	2015
		Pacific Ocean at East Beach (Mouth of Sycamore Creek)	Bacteria	2015
		Pacific Ocean at Gaviota Beach	Bacteria	2015

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
		Pacific Ocean at Hammonds Beach	Bacteria	2015
		Pacific Ocean at Hope Ranch Beach	Bacteria	2015
		Pacific Ocean at Jalama Beach	Bacteria	2015
		Pacific Ocean at Ocean Beach	Bacteria	2015
		Pacific Ocean at Point Rincon	Bacteria	2015
		Pacific Ocean at Refugio Beach	Bacteria	2015
	Santa Maria and Oso Flaco Fecal Coliform	Alamo Creek	Fecal Coliform	2008
		Blosser Channel	Fecal Coliform	2008
		Bradley Canyon Creek	Fecal Coliform	2008
		Bradley Channel	Fecal Coliform	2008
		Nipomo Creek	Fecal Coliform	2008
		Orcutt Solomon Creek	Fecal Coliform	2008
		Oso Flaco Creek	Fecal Coliform	2008
		Santa Maria River	Fecal Coliform	2008
	Santa Maria and Osos Flaco Nitrate	Main Street Canal	Nitrate	2015
		Orcutt Solomon Creek	Nitrate	2015
		Oso Flaco Creek	Nitrate	2015
		Oso Flaco Lake	Nitrate	2015
		Santa Maria River	Nitrate	2015
	Santa Maria River Pesticides TMDL	Santa Maria River	Pesticides	2015
	Santa Ynez River Nutrients TMDL	Santa Ynez River	Nitrate	2015
	Soquel Lagoon Pathogen TMDL	Soquel Lagoon	Pathogens	2006
	Soquel Lagoon Sediment TMDL	Soquel Lagoon	Sedimentation/Siltation	2011
	~~Tequisquita Slough Fecal Coliform TMDL~~	~~Tequisquita Slough~~	~~Fecal Coliform~~	~~2011~~
	~~Warden Creek Dissolved Oxygen TMDL~~	~~Warden Creek~~	~~Low Dissolved Oxygen~~	~~2015~~
	Watsonville Slough-Pesticides	Watsonville Slough	Pesticides	2007
	Watsonville Sloughs Pathogen	Watsonville Slough	Pathogens	2006
4	Ballona Creek Coliform (49)	Ballona Creek	Enteric Viruses	2006
			High Coliform Count	2006
		Ballona Creek Estuary	High Coliform Count	2006
			Shellfish Harvesting	2006

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
			Advisory	
	Ballona Creek Metals (AU #57)	Ballona Creek	Cadmium (sediment)	2005
			Copper, Dissolved	2005
			Lead, Dissolved	2005
			Selenium, Total	2005
			Silver (sediment)	2005
			Toxicity	2005
			Zinc, Dissolved	2005
		Ballona Creek Estuary	Lead (sediment)	2005
			Zinc (sediment)	2005
	Ballona Creek Toxics	Ballona Creek Estuary	Chlordane (tissue & sediment)	2005
			DDT (sediment)	2005
			PAHs (sediment)	2005
			PCBs (tissue & sediment)	2005
			Sediment Toxicity	2005
	Calleguas Creek Chloride (3)	Calleguas Creek Reach 3 (Potrero Road upstream to confluence with Conejo Creek on 1998 303d list)	Chloride	2002
		Calleguas Creek Reach 6 (was Arroyo Las Posas Reaches 1 and 2 on 1998 303d list)	Chloride	2002
		Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on 1998 303d list)	Chloride	2002
		Calleguas Creek Reach 8 (was Tapo Canyon Reach 1)	Chloride	2002
		Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2 on 1998 303d list)	Chloride	2002
		Calleguas Creek Reach 13 (Conejo Creek South Fork, was Conejo Cr Reach 4 and part of Reach 3 on 1998 303d list)	Chloride	2002
	Calleguas Creek Coliform (98)	Calleguas Creek Reach 2 (estuary to Potrero Rd- was Calleguas Creek Reaches 1 and 2	Fecal Coliform	2006

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
		on 1998 303d list)		
		Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on 1998 303d list)	Fecal Coliform	2006
		Calleguas Creek Reach 6 (was Arroyo Las Posas Reaches 1 and 2 on 1998 303d list)	Fecal Coliform	2006
		Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on 1998 303d list)	Fecal Coliform	2006
		Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998 303d list)	Fecal Coliform	2006
		Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2 on 1998 303d list)	Fecal Coliform	2006
		Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo Crk Reaches 2 & 3, and lower Conejo Crk/Arroyo Conejo N Fk on 1998 303d list)	Fecal Coliform	2006
		Calleguas Creek Reach 11 (Arroyo Santa Rosa, was part of Conejo Creek Reach 3 on 1998 303d list)	Fecal Coliform	2006
	Calleguas Creek Historic Pesticides (AU #5)	Calleguas Creek Reach 1 (was Mugu Lagoon on 1998 303(d) list)	Chlordane (tissue)	2005
			DDT (tissue & sediment)	2005
			Endosulfan (tissue)	2005
			Sediment Toxicity	2005
		Calleguas Creek Reach 2 (estuary to Potrero Rd- was Calleguas Creek Reaches 1 and 2 on 1998 303d list)	ChemA (tissue)	2005
			Chlordane (tissue)	2005
			DDT	2005

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
			Endosulfan (tissue)	2005
			Sediment Toxicity	2005
			Sedimentation/Siltation	2005
			Toxaphene (tissue & sediment)	2005
		Calleguas Creek Reach 3 (Potrero Road upstream to confluence with Conejo Creek on 1998 303d list)	Sedimentation/Siltation	2005
		Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on 1998 303d list)	ChemA (tissue)	2005
			Chlordane (tissue & sediment)	2005
			DDT (tissue & sediment)	2005
			Dieldrin (tissue)	2005
			Endosulfan (tissue & sediment)	2005
			Sedimentation/Siltation	2005
			Toxaphene (tissue & sediment)	2005
		Calleguas Creek Reach 5 (was Beardsley Channel on 1998 303d list)	ChemA (tissue)	2005
			Chlordane (tissue & sediment)	2005
			DDT (tissue & sediment)	2005
			Dacthal (sediment)	2005
			Dieldrin (tissue)	2005
			Endosulfan (tissue & sediment)	2005
			Sedimentation/Siltation	2005
			Toxaphene (tissue & sediment)	2005
		Calleguas Creek Reach 6 (was Arroyo Las Posas Reaches 1 and 2 on 1998 303d list)	DDT (sediment)	2005
			Sedimentation/Siltation	2005
		Calleguas Creek Reach 7 (was Arroyo Simi	Sedimentation/Siltation	2005

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
		Reaches 1 and 2 on 1998 303d list)		
		Calleguas Creek Reach 8 (was Tapo Canyon Reach 1)	Sedimentation/Siltation	2005
		Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998 303d list)	ChemA (tissue)	2005
			Chlordane (tissue)	2005
			DDT (tissue)	2005
			Dieldrin (tissue)	2005
			Endosulfan (tissue)	2005
			Hexachlorocyclohexane /HCH (tissue)	2005
			Toxaphene (tissue & sediment)	2005
		Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2 on 1998 303d list)	ChemA (tissue)	2005
			DDT (tissue)	2005
			Endosulfan (tissue)	2005
			Toxaphene (tissue & sediment)	2005
		Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo Crk Reaches 2 & 3, and lower Conejo Crk/Arroyo Conejo N Fk on 1998 303d list)	ChemA (tissue)	2005
			DDT (tissue)	2005
			Endosulfan (tissue)	2005
			Toxaphene (tissue & sediment)	2005
		Calleguas Creek Reach 11 (Arroyo Santa Rosa, was part of Conejo Creek Reach 3 on 1998 303d list)	ChemA (tissue)	2005
			DDT (tissue)	2005
			Endosulfan (tissue)	2005
			Sedimentation/Siltation	2005
			Toxaphene (tissue & sediment)	2005
		Calleguas Creek Reach 12 (was Conejo	Chlordane (tissue)	2005

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
		Creek/Arroyo Conejo North Fork on 1998 303d list)		
			DDT (tissue)	2005
		Calleguas Creek Reach 13 (Conejo Creek South Fork, was Conejo Cr Reach 4 and part of Reach 3 on 1998 303d list)	ChemA (tissue)	2005
			DDT (tissue)	2005
			Endosulfan (tissue)	2005
			Toxaphene (tissue & sediment)	2005
		Duck Pond Agricultural Drains/Mugu Drain/Oxnard Drain No 2	ChemA (tissue)	2005
			Chlordane (tissue)	2005
			DDT (tissue & sediment)	2005
			Sediment Toxicity	2005
			Toxaphene (tissue)	2005
	Calleguas Creek Metals (6)	Calleguas Creek Reach 1 (was Mugu Lagoon on 1998 303(d) list)	Copper	2006
			Mercury	2006
			Nickel	2006
			Zinc	2006
		Calleguas Creek Reach 2 (estuary to Potrero Rd- was Calleguas Creek Reaches 1 and 2 on 1998 303d list)	Copper, Dissolved	2006
		Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on 1998 303d list)	Selenium	2006
	Calleguas Creek Nitrogen	Calleguas Creek Reach 1 (was Mugu Lagoon on 1998 303(d) list)	Nitrogen	2002
		Calleguas Creek Reach 2 (estuary to Potrero Rd- was Calleguas Creek Reaches 1 and 2 on 1998 303d list)	Ammonia	2002

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
			Nitrogen	2002
		Calleguas Creek Reach 3 (Potrero Road upstream to confluence with Conejo Creek on 1998 303d list)	Nitrate and Nitrite	2002
		Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on 1998 303d list)	Algae	2002
			Nitrate as Nitrate (NO3)	2002
			Nitrogen	2002
		Calleguas Creek Reach 5 (was Beardsley Channel on 1998 303d list)	Algae	2002
			Nitrogen	2002
		Calleguas Creek Reach 6 (was Arroyo Las Posas Reaches 1 and 2 on 1998 303d list)	Ammonia	2002
			Nitrate and Nitrite	2002
			Nitrate as Nitrate (NO3)	2002
		Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on 1998 303d list)	Ammonia	2002
		Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998 303d list)	Algae	2002
			Nitrate as Nitrate (NO3)	2002
			Nitrate as Nitrogen	2002
			Nitrite as Nitrogen	2002
		Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2 on 1998 303d list)	Algae	2002
			Ammonia	2002
		Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo Crk Reaches 2 & 3, and lower Conejo Crk/Arroyo Conejo N Fk on 1998 303d list)	Algae	2002

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
			Ammonia	2002
			Nitrite as Nitrogen	2002
		Calleguas Creek Reach 11 (Arroyo Santa Rosa, was part of Conejo Creek Reach 3 on 1998 303d list)	Algae	2002
			Ammonia	2002
		Calleguas Creek Reach 12 (was Conejo Creek/Arroyo Conejo North Fork on 1998 303d list)	Ammonia	2002
		Calleguas Creek Reach 13 (Conejo Creek South Fork, was Conejo Cr Reach 4 and part of Reach 3 on 1998 303d list)	Algae	2002
			Ammonia	2002
		Duck Pond Agricultural Drains/Mugu Drain/Oxnard Drain No 2	Nitrogen	2002
		Fox Barranca (tributary to Calleguas Creek Reach 6)	Nitrate and Nitrite	2002
	Calleguas Creek PCBs (7)	Calleguas Creek Reach 1 (was Mugu Lagoon on 1998 303(d) list)	PCBs (tissue)	2005
		Calleguas Creek Reach 2 (estuary to Potrero Rd- was Calleguas Creek Reaches 1 and 2 on 1998 303d list)	PCBs (tissue)	2005
		Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on 1998 303d list)	PCBs (tissue)	2005
		Calleguas Creek Reach 5 (was Beardsley Channel on 1998 303d list)	PCBs (tissue)	2005
		Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998 303d list)	PCBs (tissue)	2005

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
	Calleguas Creek Toxicity (2)	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on 1998 303d list)	Chlorpyrifos (tissue)	2005
			Toxicity	2005
		Calleguas Creek Reach 5 (was Beardsley Channel on 1998 303d list)	Chlorpyrifos (tissue)	2005
			Toxicity	2005
		Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on 1998 303d list)	Organophosphorus Pesticides	2005
		Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2 on 1998 303d list)	Toxicity	2005
		Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo Crk Reaches 2 & 3, and lower Conejo Crk/Arroyo Conejo N Fk on 1998 303d list)	Toxicity	2005
		Calleguas Creek Reach 11 (Arroyo Santa Rosa, was part of Conejo Creek Reach 3 on 1998 303d list)	Toxicity	2005
		Calleguas Creek Reach 13 (Conejo Creek South Fork, was Conejo Cr Reach 4 and part of Reach 3 on 1998 303d list)	Toxicity	2005
		Duck Pond Agricultural Drains/Mugu Drain/Oxnard Drain No 2	Toxicity	2005
	Dominguez Channel	Dominguez Channel (Estuary to Vermont)	High Coliform Count	2007
		Dominguez Channel (above Vermont)	High Coliform Count	2007
		Torrance Carson Channel	High Coliform Count	2007
		Wilmington Drain	High Coliform Count	2007

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
	Los Angeles Harbor Beaches - Beach Closures	Cabrillo Beach (Inner) LA Harbor Area	Beach Closures (Coliform)	2004
		Los Angeles Harbor Main Channel	Beach Closures	2004
	Los Angeles River Metals/Toxics	Aliso Canyon Wash	Selenium	2005
		Burbank Western Channel	Cadmium	2005
		Compton Creek	Copper	2005
			Lead	2005
		Dry Canyon Creek	Selenium, Total	2005
		Los Angeles River Reach 1 (Estuary to Carson Street)	Aluminum, Total	2005
			Cadmium, Dissolved	2005
			Copper, Dissolved	2005
			Lead	2005
			Zinc, Dissolved	2005
		Los Angeles River Reach 2 (Carson to Figueroa Street)	Lead	2005
		Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)	Lead	2005
		McCoy Canyon Creek	Selenium, Total	2005
		Monrovia Canyon Creek	Lead	2005
		Rio Hondo Reach 1 (Confl. LA River to Snt Ana Fwy)	Copper	2005
			Lead	2005
			Zinc	2005
		Tujunga Wash (LA River to Hansen Dam)	Copper	2005
	Los Angeles River Nitrogen	Arroyo Seco Reach 1 (LA River to West Holly Ave.)	Algae	2003
		Arroyo Seco Reach 2 (Figueroa St. to Riverside Dr.)	Algae	2003
		Burbank Western Channel	Algae	2003
			Ammonia	2003
			Odors	2003
			Scum/Foam-unnatural	2003
		Compton Creek	pH	2003
		Los Angeles River Reach 1 (Estuary to	Ammonia	2003

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
		Carson Street)		
			Nutrients (Algae)	2003
			Scum/Foam-unnatural	2003
			pH	2003
		Los Angeles River Reach 2 (Carson to Figueroa Street)	Ammonia	2003
			Nutrients (Algae)	2003
			Odors	2003
			Scum/Foam-unnatural	2003
		Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	Ammonia	2003
			Nutrients (Algae)	2003
			Odors	2003
			Scum/Foam-unnatural	2003
		Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)	Ammonia	2003
			Nutrients (Algae)	2003
			Odors	2003
			Scum/Foam-unnatural	2003
		Los Angeles River Reach 5 (within Sepulveda Basin)	Ammonia	2003
			Nutrients (Algae)	2003
			Odors	2003
			Scum/Foam-unnatural	2003
		Rio Hondo Reach 1 (Confl. LA River to Snt Ana Fwy)	pH	2003
		Tujunga Wash (LA River to Hansen Dam)	Ammonia	2003
			Odors	2003
			Scum/Foam-unnatural	2003
		Verdugo Wash Reach 1 (LA River to Verdugo Rd.)	Algae	2003
		Verdugo Wash Reach 2 (Above Verdugo Road)	Algae	2003
	Los Angeles River Pathogens	Arroyo Seco Reach 1 (LA River to West Holly Ave.)	High Coliform Count	2009
		Arroyo Seco Reach 2 (Figueroa St. to Riverside Dr.)	High Coliform Count	2009
		Bell Creek	High Coliform Count	2009

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
		Compton Creek	High Coliform Count	2009
		Dry Canyon Creek	Fecal Coliform	2009
		Los Angeles River Reach 1 (Estuary to Carson Street)	High Coliform Count	2009
		Los Angeles River Reach 2 (Carson to Figueroa Street)	High Coliform Count	2009
		Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)	High Coliform Count	2009
		Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin)	High Coliform Count	2009
		McCoy Canyon Creek	Fecal Coliform	2009
		Rio Hondo Reach 1 (Confl. LA River to Snt Ana Fwy)	High Coliform Count	2009
		Rio Hondo Reach 2 (At Spreading Grounds)	High Coliform Count	2009
		Tujunga Wash (LA River to Hansen Dam)	High Coliform Count	2009
		Verdugo Wash Reach 1 (LA River to Verdugo Rd.)	High Coliform Count	2009
		Verdugo Wash Reach 2 (Above Verdugo Road)	High Coliform Count	2009
	Los Angeles River Trash (12)	Arroyo Seco Reach 1 (LA River to West Holly Ave.)	Trash	~~2002~~2007
		Arroyo Seco Reach 2 (Figueroa St. to Riverside Dr.)	Trash	~~2002~~2007
		Burbank Western Channel	Trash	~~2002~~2007
		Echo Park Lake	Trash	2007
		Lincoln Park Lake	Trash	2007
		Los Angeles River Estuary (Queensway Bay)	Trash	2007
		Los Angeles River Reach 1 (Estuary to Carson Street)	Trash	2007
		Los Angeles River Reach 2 (Carson to Figueroa Street)	Trash	2007
		Los Angeles River Reach 3 (Figueroa St.	Trash	2007

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
		to Riverside Dr.)		
		Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)	Trash	2007
		Los Angeles River Reach 5 (within Sepulveda Basin)	Trash	2007
		Peck Road Lake	Trash	2007
		Rio Hondo Reach 1 (Confl. LA River to Snt Ana Fwy)	Trash	2007
		Tujunga Wash (LA River to Hansen Dam)	Trash	~~2002~~2007
		Verdugo Wash Reach 1 (LA River to Verdugo Rd.)	Trash	~~2002~~2007
		Verdugo Wash Reach 2 (Above Verdugo Road)	Trash	~~2002~~2007
	Malibu Creek Nutrients	Lake Calabasas	Ammonia	2006
		Lake Lindero	Algae	2006
			Eutrophic	2006
			Odors	2006
		Lake Sherwood	Algae	2006
			Ammonia	2006
			Eutrophic	2006
			Organic Enrichment/Low Dissolved Oxygen	2006
		Las Virgenes Creek	Nutrients (Algae)	2006
			Organic Enrichment/Low Dissolved Oxygen	2006
			Scum/Foam-unnatural	2006
		Lindero Creek Reach 1	Algae	2006
			Scum/Foam-unnatural	2006
		Lindero Creek Reach 2 (Above Lake)	Algae	2006
			Scum/Foam-unnatural	2006
		Malibou Lake	Algae	2006
			Eutrophic	2006
			Organic Enrichment/Low Dissolved Oxygen	2006
		Malibu Creek	Nutrients (Algae)	2006
			Scum/Foam-unnatural	2006
		Malibu Lagoon	Eutrophic	2006
			pH	2006

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
		Medea Creek Reach 1 (Lake to Confl. with Lindero)	Algae	2006
		Medea Creek Reach 2 (Abv Confl. with Lindero)	Algae	2006
		Westlake Lake	Algae	2006
			Ammonia	2006
			Eutrophic	2006
			Organic Enrichment/Low Dissolved Oxygen	2006
	Malibu Pathogens	Las Virgenes Creek	High Coliform Count	2005
		Lindero Creek Reach 1	High Coliform Count	2005
		Lindero Creek Reach 2 (Above Lake)	High Coliform Count	2005
		Malibu Creek	High Coliform Count	2005
		Malibu Lagoon	Enteric Viruses	2005
			High Coliform Count	2005
			Shellfish Harvesting Advisory	2005
			Swimming Restrictions	2005
		Medea Creek Reach 1 (Lake to Confl. with Lindero)	High Coliform Count	2005
		Medea Creek Reach 2 (Abv Confl. with Lindero)	High Coliform Count	2005
		Palo Comado Creek	High Coliform Count	2005
		Stokes Creek	High Coliform Count	2005
	Marina Del Rey Toxics	Marina del Rey Harbor - Back Basins	Chlordane (tissue & sediment)	2005
			DDT (tissue)	2005
			Dieldrin (tissue)	2005
			Fish Consumption Advisory	2005
			PCBs (tissue & sediment)	2005
			Sediment Toxicity	2005
	Marina del Rey Harbor - Back Basins Metals (AU #56)	Marina del Rey Harbor - Back Basins	Copper (sediment)	2005
			Lead (sediment)	2005
			Zinc (sediment)	2005
	Marina del Rey Pathogens	Marina del Rey Harbor - Back Basins	High Coliform Count	2003
		Marina del Rey Harbor	Beach Closures	2003

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
		Beach		
			High Coliform Count	2003
	McGrath Beach Coliform	McGrath Beach	High Coliform Count	2003
	San Gabriel River Metals (39)	Coyote Creek	Copper, Dissolved	2006
			Lead, Dissolved	2006
			Selenium, Total	2006
			Zinc, Dissolved	2006
		San Gabriel River Reach 2 (Firestone to Whittier Narrows Dam	Copper, Dissolved	2006
			Lead	2006
			Zinc, Dissolved	2006
	San Gabriel River Nutrients	Coyote Creek	Algae	2007
			Toxicity	2007
		San Gabriel River Reach 1 (Estuary to Firestone)	Algae	2007
			Toxicity	2007
		San Gabriel River Reach 3 (Whittier Narrows to Ramona)	Toxicity	2007
		San Jose Creek Reach 1 (SG Confluence to Temple St.)	Algae	2007
		San Jose Creek Reach 2 (Temple to I-10 at White Ave.)	Algae	2007
		Walnut Creek Wash (Drains from Puddingstone Res)	Toxicity	2007
			pH	2007
	Santa Clara River Chloride	Santa Clara River Reach 7 (Blue Cut to West Pier Hwy 99 Bridge)	Chloride	2004
		Santa Clara River Reach 8 (W Pier Hwy 99 to Bouquet Cyn Rd.)	Chloride	2004
	Santa Clara River Nitrogen	Brown Barranca/Long Canyon	Nitrate and Nitrite	2003
		Mint Canyon Creek Reach 1 (Confl to Rowler Cyn)	Nitrate and Nitrite	2003
		Santa Clara River Reach 3 (Freeman	Ammonia	2003

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
		Diversion to A Street)		
		Santa Clara River Reach 7 (Blue Cut to West Pier Hwy 99 Bridge)	Nitrate and Nitrite	2003
		Torrey Canyon Creek	Nitrate and Nitrite	2003
		Wheeler Canyon/Todd Barranca	Nitrate and Nitrite	2003
5	Acid Mine Drainage and Metals TMDL Project	Arcade Creek	Copper	2020
		Camanche Reservoir	Copper	2020
			Zinc	2020
		Dolly Creek	Copper	2020
			Zinc	2020
		Dunn Creek (Mt Diablo Mine to Marsh Creek)	Metals	2020
		Horse Creek (Rising Star Mine to Shasta Lake)	Cadmium	2020
			Copper	2020
			Lead	2020
			Zinc	2020
		Humbug Creek	Copper	2020
			Zinc	2020
		James Creek	Nickel	2020
		Kanaka Creek	Arsenic	2020
		Keswick Reservoir (portion downstream from Spring Creek)	Cadmium	2020
			Copper	2020
			Zinc	2020
		Little Backbone Creek, Lower	Acid Mine Drainage	2020
			Cadmium	2020
			Copper	2020
			Zinc	2020
		Little Cow Creek (downstream from Afterthought Mine)	Cadmium	2020
			Copper	2020
			Zinc	2020
		Little Grizzly Creek	Copper	2020
			Zinc	2020
		Marsh Creek (Dunn Creek to Marsh Creek Reservoir)	Metals	2020

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
		Marsh Creek (Marsh Creek Reservoir to San Joaquin River)	Metals	2020
		Mokelumne River, Lower	Copper	2020
			Zinc	2020
		Shasta Lake (area where West Squaw Creek enters)	Cadmium	2020
			Copper	2020
			Zinc	2020
		Spring Creek, Lower (Iron Mountain Mine to Keswick Reservoir)	Acid Mine Drainage	2020
			Cadmium	2020
			Copper	2020
			Zinc	2020
		Town Creek	Cadmium	2020
			Copper	2020
			Lead	2020
			Zinc	2020
		West Squaw Creek (below Balaklala Mine)	Cadmium	2020
			Copper	2020
			Lead	2020
			Zinc	2020
		Willow Creek (Shasta County, below Greenhorn Mine to Clear Creek)	Acid Mine Drainage	2020
			Copper	2020
			Zinc	2020
	American River Mercury and Methylmercury TMDL Project	American River, Lower (Nimbus Dam to confluence with Sacramento River)	Mercury	2008
	Bear Creek and Sulphur Creek Mercury TMDL Project	Bear Creek	Mercury	2005
		Sulphur Creek (Colusa County)	Mercury	2005
	Bear River Watershed Mercury TMDL Project	Bear River, Upper	Mercury	2011
		Camp Far West Reservoir	Mercury	2011
		Combie, Lake	Mercury	2011
	Black Butte Reservoir Mercury TMDL	Black Butte Reservoir	Mercury	2015

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
	Cache Creek, Bear Creek, Sulphur Creek, and Harley Gulch Mercury TMDL Project	Bear Creek	Mercury	2005
		Cache Creek, Lower (Clear Lake Dam to Cache Creek Settling Basin near Yolo Bypass)	Mercury	2005
		Harley Gulch	Mercury	2005
		Sulphur Creek (Colusa County)	Mercury	2005
	Central Valley Organo-chlorine Pesticides	Colusa Basin Drain	Group A Pesticides	2011
		Delta Waterways (Stockton Ship Channel)	DDT	2011
			Group A Pesticides	2011
		Delta Waterways (eastern portion)	DDT	2011
			Group A Pesticides	2011
		Delta Waterways (western portion)	DDT	2011
			Group A Pesticides	2011
		Feather River, Lower (Lake Oroville Dam to Confluence with Sacramento River)	Group A Pesticides	2011
		Merced River, Lower (McSwain Reservoir to San Joaquin River)	Group A Pesticides	2011
		Orestimba Creek (above Kilburn Road)	DDE	2011
		Orestimba Creek (below Kilburn Road)	DDE	2011
		San Joaquin River (Bear Creek to Mud Slough)	DDT	2011
			Group A Pesticides	2011
		San Joaquin River (Mendota Pool to Bear Creek)	DDT	2011
			Group A Pesticides	2011
		San Joaquin River (Merced River to South Delta Boundary)	DDT	2011
			Group A Pesticides	2011
		San Joaquin River (Mud Slough to Merced River)	DDT	2011
			Group A Pesticides	2011

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
		Stanislaus River, Lower	Group A Pesticides	2011
		Tuolumne River, Lower (Don Pedro Reservoir to San Joaquin River)	Group A Pesticides	2011
	Clear Lake Mercury TMDL Project	Clear Lake	Mercury	2003
	Clear Lake Nutrient TMDL Project	Clear Lake	Nutrients	2006
	Cow Creek Watershed Pathogens	Clover Creek	Fecal Coliform	2012
		Oak Run Creek	Fecal Coliform	2012
		South Cow Creek	Fecal Coliform	2012
	Dairies TMDL	Avena Drain	Ammonia	2020
			Pathogens	2020
		Lone Tree Creek	Ammonia	2020
			Biological Oxygen Demand	2020
			Electrical Conductivity	2020
		Temple Creek	Ammonia	2020
			Electrical Conductivity	2020
	Davis Creek Reservoir Mercury TMDL Project	Davis Creek Reservoir	Mercury	2010
	Deer Creek pH	Deer Creek (Yuba County)	pH	2011
	Delta Mercury and Methylmercury TMDL Project	Delta Waterways (Stockton Ship Channel)	Mercury	2006
				2006
		Delta Waterways (eastern portion)	Mercury	2006
				2006
		Delta Waterways (western portion)	Mercury	2006
				2006
	Fall River Sediment	Fall River (Pit)	Sedimentation/Siltation	2016
	Feather River Mercury TMDL Project	Feather River, Lower (Lake Oroville Dam to Confluence with Sacramento River)	Mercury	2009
	Harding Drain Ammonia	Harding Drain (Turlock Irrigation District Lateral #5)	Ammonia	2007
	Kings River	Kings River, Lower (Island Weir to Stinson and Empire Weirs)	Electrical Conductivity	2015
			Molybdenum	2015
			Toxaphene	2015
	Marsh Creek Watershed	Dunn Creek (Mt Diablo	Mercury	2013

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
	Mercury TMDL Project	Mine to Marsh Creek)		
		Marsh Creek (Marsh Creek Reservoir to San Joaquin River)	Mercury	2013
		Marsh Creek Reservoir	Mercury	2013
	Natomas East Main Drain PCBs	Natomas East Main Drainage Canal (aka Steelhead Creek, downstream of confluence with Arcade Creek)	PCBs	2020
		Natomas East Main Drainage Canal (aka Steelhead Creek, upstream of confluence with Arcade Creek)	PCBs	2020
	Panoche Creek Sediment and Selenium	Panoche Creek (Silver Creek to Belmont Avenue)	Sedimentation/Siltation	2007
			Selenium	2007
	Panoche Creek and San Carlos Creek Mercury TMDL Project	Panoche Creek (Silver Creek to Belmont Avenue)	Mercury	2020
		San Carlos Creek (downstream of New Idria Mine)	Mercury	2020
	Pit River	Pit River	Nutrients	2013
			Organic Enrichment/Low Dissolved Oxygen	2013
			Temperature	2013
	Putah Creek Watershed Mercury TMDL	Berryessa, Lake	Mercury	2015
		James Creek	Mercury	2015
		Putah Creek, Lower	Mercury	2015
	Sacramento River Mercury TMDL Project	Sacramento River (Knights Landing to the Delta)	Mercury	2010
				2008
	Sacramento Slough Mercury TMDL Project	Sacramento Slough	Mercury	2020
	Sacramento and San Joaquin Pesticides Basin Plan Amendment and TMDLs	Bear River, Lower (below Camp Far West Reservoir)	Diazinon	2008
		Butte Slough	Diazinon	2008
		Colusa Basin Drain	Azinphos-methyl	2008
			Carbofuran/Furadan	2008

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
			Diazinon	2008
			Malathion	2008
			Methyl Parathion	2008
			Molinate/Odram	2008
		Del Puerto Creek	Chlorpyrifos	2008
			Diazinon	2008
		Harding Drain (Turlock Irrigation District Lateral #5)	Chlorpyrifos	2008
			Diazinon	2008
		Ingram/Hospital Creek	Chlorpyrifos	2008
			Diazinon	2008
		Jack Slough	Diazinon	2008
		Merced River, Lower (McSwain Reservoir to San Joaquin River)	Chlorpyrifos	2008
			Diazinon	2008
		Natomas East Main Drainage Canal (aka Steelhead Creek, downstream of confluence with Arcade Creek)	Diazinon	2008
		Newman Wasteway	Chlorpyrifos	2008
			Diazinon	2008
		Orestimba Creek (above Kilburn Road)	Azinphos-methyl	2008
			Chlorpyrifos	2008
			Diazinon	2008
		Orestimba Creek (below Kilburn Road)	Azinphos-methyl	2008
			Chlorpyrifos	2008
			Diazinon	2008
		Sacramento Slough	Diazinon	2008
		Salt Slough (upstream from confluence with San Joaquin River)	Chlorpyrifos	2008
			Diazinon	2008
		Stanislaus River, Lower	Diazinon	2008
		Sutter Bypass	Diazinon	2008
		Tuolumne River, Lower (Don Pedro Reservoir to San Joaquin River)	Diazinon	2008
	San Joaquin River Diazinon and Chlorpyrifos	San Joaquin River (Bear Creek to Mud Slough)	Chlorpyrifos	2006

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
			Diazinon	2006
		San Joaquin River (Mendota Pool to Bear Creek)	Chlorpyrifos	2006
			Diazinon	2006
		San Joaquin River (Merced River to South Delta Boundary)	Chlorpyrifos	2006
			Diazinon	2006
		San Joaquin River (Mud Slough to Merced River)	Chlorpyrifos	2006
			Diazinon	2006
	San Joaquin River Dissolved Oxygen	Delta Waterways (Stockton Ship Channel)	Organic Enrichment/Low Dissolved Oxygen	2005
	San Joaquin River EC and Boron Upstream of Stanislaus Confluence	San Joaquin River (Bear Creek to Mud Slough)	Boron	2006
			Electrical Conductivity	2006
		San Joaquin River (Mendota Pool to Bear Creek)	Boron	2006
			Electrical Conductivity	2006
		San Joaquin River (Mud Slough to Merced River)	Boron	2006
			Electrical Conductivity	2006
	San Joaquin River Mercury TMDL Project	Don Pedro Lake	Mercury	2020
		San Joaquin River (Bear Creek to Mud Slough)	Mercury	2020
		San Joaquin River (Merced River to South Delta Boundary)	Mercury	2020
		San Joaquin River (Mud Slough to Merced River)	Mercury	2020
		Stanislaus River, Lower	Mercury	2020
	San Joaquin River Salt and Boron	San Joaquin River (Merced River to South Delta Boundary)	Boron	2004
				2004
				2004
			Electrical Conductivity	2004
				2004
				2004
	San Joaquin River Tributaries Salinity and Boron	Grasslands Marshes	Electrical Conductivity	2008

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
		Mud Slough	Boron	2008
			Electrical Conductivity	2008
		Salt Slough (upstream from confluence with San Joaquin River)	Boron	2008
			Electrical Conductivity	2008
	Stockton Area Sloughs and Rivers	Calaveras River, Lower	Diazinon	2008
			Organic Enrichment/Low Dissolved Oxygen	2008
			Pathogens	2008
		Five Mile Slough (Alexandria Place to Fourteen Mile Slough)	Chlorpyrifos	2008
			Diazinon	2008
			Organic Enrichment/Low Dissolved Oxygen	2008
			Pathogens	2008
		Mormon Slough (Commerce Street to Stockton Deep Water Channel)	Organic Enrichment/Low Dissolved Oxygen	2008
			Pathogens	2008
		Mormon Slough (Stockton Diverting Canal to Commerce Street)	Pathogens	2008
		Mosher Slough (downstream of I-5)	Chlorpyrifos	2008
			Diazinon	2008
			Organic Enrichment/Low Dissolved Oxygen	2008
			Pathogens	2008
		Mosher Slough (upstream of I-5)	Pathogens	2008
		Smith Canal	Organic Enrichment/Low Dissolved Oxygen	2008
			Organophosphorus Pesticides	2008
			Pathogens	2008
		Stockton Deep Water Channel, Upper (Port Turning Basin)	Pathogens	2008
		Walker Slough	Pathogens	2008

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
	Yuba River Watershed Mercury TMDL Project	Englebright Lake	Mercury	2012
		Humbug Creek	Mercury	2012
			Sedimentation/Siltation	2012
		Little Deer Creek	Mercury	2012
		Rollins Reservoir	Mercury	2012
		Scotts Flat Reservoir	Mercury	2012
6	Blackwood Creek	Blackwood Creek	Iron	~~2007~~2015
			~~Nitrogen~~	~~2007~~
			~~Phosphorus~~	~~2007~~
			~~Sedimentation/Siltation~~	~~2007~~
	Bodie Creek	Bodie Creek	Metals	2008~~2006~~
	Bridgeport Reservoir	Bridgeport Reservoir	Nitrogen	2006
			Phosphorus	2006
			Sedimentation/Siltation	2006
	Bronco Creek	Bronco Creek	Sedimentation/Siltation	2006
	Clearwater Creek	Clearwater Creek	Sedimentation/Siltation	2006
	Donner Lake PCBs	Donner Lake	Priority Organics	2007
	Gray Creek	Gray Creek (Nevada County)	Sedimentation/Siltation	2006
	Heavenly Valley Creek (source to USFS boundary) Sediment	Heavenly Valley Creek (source to USFS boundary)	Sedimentation/Siltation	2001
	Hot Springs Canyon Creek Sediment	Hot Springs Canyon Creek	Sedimentation/Siltation	2008~~2006~~
	Indian Creek Reservoir Phosphorus	Indian Creek Reservoir	Phosphorus	2002
	Lake Tahoe Nutrients/Sediment	Tahoe, Lake	Nitrogen	2008~~2007~~
		Blackwood Creek	Phosphorus	2008~~2007~~
		Ward Creek	Sedimentation/Siltation	2008~~2007~~
	Squaw Creek Sediment	Squaw Creek	Sedimentation/Siltation	2006~~2005~~
	~~Susan River Toxicity~~	~~Susan River~~	~~Unknown Toxicity~~	~~2007~~
	Truckee River Sediment	Truckee River	Sedimentation/Siltation	2006
	Ward Creek Sediment	Ward Creek	Iron	2015~~2007~~
			~~Nitrogen~~	~~2007~~
			~~Phosphorus~~	~~2007~~
			Sedimentation/Siltation	2007
7	Alamo River Sedimentation/Siltation	Alamo River	Silt	2001

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
	Coachella Valley Storm Channel Pathogen TMDL	Coachella Valley Storm Channel	Pathogens	2006
	Imperial Valley Drains (Niland 2, P, Pumice, and their tributary drains) Sediment TMDL	Imperial Valley Drains	Sedimentation/Siltation	2004
	New River 1,2,4-trimethylbenzene TMDL	New River (Imperial)	1,2,4-trimethylbenzene	2006
	New River Chloroform TMDL	New River (Imperial)	Chloroform	2006
	New River Dissolved Oxygen TMDL	New River (Imperial)	Organic Enrichment/Low Dissolved Oxygen	2006
	New River M,P-Xylenes TMDL	New River (Imperial)	m,p,-Xylenes	2006
	New River Pathogen	New River	Bacteria	2001
	New River Sedimentation/Siltation	New River	Silt	2002
	New River Toluene TMDL	New River (Imperial)	Toluene	2006
	New River Trash TMDL	New River (Imperial)	Trash	2006
	New River o-Xylenes TMDL	New River (Imperial)	o-Xylenes	2006
	New River p-Cymene TMDL	New River (Imperial)	p-Cymene	2006
	New River p-Dichlorobenzene (DCB) TMDL	New River (Imperial)	p-Dichlorobenzene (DCB)	2006
	Palo Verde Outfall Drain Pathogen TMDL	Palo Verde Outfall Drain	Pathogens	2006
	Salton Sea Nutrient	New River (Imperial)	Nutrients	2006
		Salton Sea	Nutrients	2006
		Grout Creek	Nutrients	2008
8	Anaheim Bay TMDLs	Anaheim Bay	PCBs	2016
			Toxicity	2016
	Balboa Beach TMDLs	Balboa Beach	DDT	2016
			Dieldrin	2016
			PCBs	2016
	Big Bear Lake TMDLs	Big Bear Lake	PCBs	2016
	Big Bear Lake Tributaries Nutrient TMDLs	Rathbone (Rathbun) Creek	Nutrients	2008
		Summit Creek	Nutrients	2008
	Big Bear Lake Watershed Metals TMDL	Big Bear Lake	Copper	2007
			Mercury	2007
			Metals	2007
		Grout Creek	Metals	2007
		Knickerbocker Creek	Metals	2007
	Big Bear Lake Watershed Nutrient TMDL	Big Bear Lake	Noxious aquatic plants	2006

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
			Nutrients	2006
	Big Bear Lake Watershed Sediment TMDL	Big Bear Lake	Sedimentation/Siltation	2006
		Rathbone (Rathbun) Creek	Sedimentation/Siltation	2006
	Canyon Lake Bacteria TMDL	Canyon Lake (Railroad Canyon Reservoir)	Pathogens	2006~~2005~~
	Central Irvine Channel TMDL	Central Irvine Channel	Selenium	2007
	Como Channel TMDL	Como Channel	Selenium	2007
	El Modena – Irvine Channel TMDL	El Modena – Irvine Channel	Selenium	2007
	Huntington Beach State Park TMDL	Huntington Beach State Park	PCBs	2016
	Huntington Harbour TMDLs	Huntington Harbour	Chlordane	2016
			Lead	2016
			Toxicity	2016
	Knickerbocker Cr., Bacteria TMDL	Knickerbocker Creek	Pathogens	2005
				~~2005~~
	Lake Elsinore TMDL	Lake Elsinore	PCBs	2016
	Lake Elsinore Toxicity TMDL	Elsinore, Lake	Unknown Toxicity	2007
	Lake Elsinore Watershed Nutrient TMDL	Canyon Lake (Railroad Canyon Reservoir)	Nutrients	2004
		Elsinore, Lake	Nutrients	2004
			Organic Enrichment/Low Dissolved Oxygen	2004
	Lane Channel TMDL	Lane Channel	Selenium	2007
	Newport Bay Watershed Copper TMDL	Newport Bay, Lower	Copper	2007~~2006~~
		Newport Bay, Upper (Ecological Reserve)	Copper	2007~~2006~~
		San Diego Creek Reach 2	Metals	2007~~2006~~
	Newport Bay Watershed TMDL	Newport Bay, Lower	Sediment Toxicity	2012
	Newport Bay Watershed Organochlorine Compounds TMDL	Newport Bay, Lower	~~Pesticides~~ DDT	2006
			Chlordane	2006
			~~Priority Organics~~ PCBs	2006
		Newport Bay, Upper (Ecological Reserve)	~~Pesticides~~ DDT Chlordane PCBs	2006~~2006~~
		San Diego Creek Reach 1	~~Pesticides~~Toxaphene	2006

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
	Newport Bay Watershed Rhine Channel TMDLs	Newport Bay, Lower	Metals	2006
			Pesticides	2006
			Priority Organics	2006
		Rhine Channel	Copper	2006
			Lead	2006
			Mercury	2006
			PCBs	2006
			Zinc	2006
			Sediment Toxicity	2012
	Newport Bay Watershed Selenium TMDL	San Diego Creek Reach 1	Selenium	2007
		San Diego Creek Reach 2	Metals	2007
	Prado Area Streams Pathogen TMDL	Chino Creek Reach 1	Pathogens	2005
		Chino Creek Reach 2	High Coliform Count	2005
		Cucamonga Creek, Valley Reach	High Coliform Count	2005
		Mill Creek (Prado Area)	Pathogens	2005
		Prado Park Lake	Pathogens	2005
		Santa Ana River, Reach 3	Pathogens	2005
	Peters Canyon Channel TMDLs	Peters Canyon Channel	Toxaphene	2006
			Selenium	2007
	Santa Fe Channel TMDL	Santa Fe Channel	Selenium	2007
	Seal Beach TMDL	Seal Beach	PCBs	2016
9	7th Street Channel	San Diego Bay Shoreline, Seventh Street Channel	Benthic Community Effects	2008
			Sediment Toxicity	2008
	Bacteria Impaired Waters I (creeks and beach shorelines)	Aliso Creek	Bacteria Indicators	2005
		Aliso Creek (mouth)	Bacteria Indicators	2005
		Chollas Creek	Bacteria Indicators	2005
		Forester Creek	Fecal Coliform	2005
		Pacific Ocean Shoreline, Aliso HSA	Bacteria Indicators	2005
		Pacific Ocean Shoreline, Dana Point HSA	Bacteria Indicators	2005
		Pacific Ocean Shoreline, Laguna Beach HSA	Bacteria Indicators	2005
		Pacific Ocean	Bacteria Indicators	2005

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
		Shoreline, Miramar Reservoir HA		
		Pacific Ocean Shoreline, San Clemente HA	Bacteria Indicators	2005
		Pacific Ocean Shoreline, San Diego HU	Bacteria Indicators	2005
		Pacific Ocean Shoreline, San Diequito HU	Bacteria Indicators	2005
		Pacific Ocean Shoreline, San Joaquin Hills HSA	Bacteria Indicators	2005
		Pacific Ocean Shoreline, San Luis Rey HU	Bacteria Indicators	2005
		Pacific Ocean Shoreline, San Marcos HA	Bacteria Indicators	2005
		Pacific Ocean Shoreline, Scripps HA	Bacteria Indicators	2005
		Pine Valley Creek (Upper)	Enterococci	2010
		San Diego River (Lower)	Fecal Coliform	2005
		San Juan Creek	Bacteria Indicators	2005
	Bacteria Impaired Waters II (Bays, Lagoons, and Shorelines)	Agua Hedionda Lagoon	Bacteria Indicators	2006
		Buena Vista Lagoon	Bacteria Indicators	2008
		Dana Point Harbor	Bacteria Indicators	2006
		Loma Alta Slough	Bacteria Indicators	2008
		Pacific Ocean Shoreline, Buena Vista Creek HA	Bacteria Indicators	2008
		Pacific Ocean Shoreline, Escondido Creek HA	Bacteria Indicators	2008
		Pacific Ocean Shoreline, Loma Alta HA	Bacteria Indicators	2008
		Pacific Ocean Shoreline, Lower San Juan HSA	Bacteria Indicators	2008
		Pacific Ocean Shoreline, Tijuana HU	Bacteria Indicators	2010
		~~San Diego Bay Shoreline, Chula Vista~~	~~Bacteria Indicators~~	~~2006~~

Regional Board	TMDL Project Name	Water Body	Pollutant	TMDL Completion Date
		~~Marina~~		
		San Diego Bay Shoreline, G Street Pier	Bacteria Indicators	2006
		San Diego Bay Shoreline, Shelter Island Shoreline Park	Bacteria Indicators	2006
		San Diego Bay Shoreline, Tidelands Park	Bacteria Indicators	2006
		San Diego Bay Shoreline, Vicinity of B St and Broadway Piers	Bacteria Indicators	2006
		San Elijo Lagoon	Bacteria Indicators	2008
		San Juan Creek (mouth)	Bacteria Indicators	2008
		Tecolote Creek	Bacteria Indicators	2006
		Tijuana River	Bacteria Indicators	2010
		Tijuana River Estuary	Bacteria Indicators	2010
	Chollas Creek Metals	Chollas Creek	Copper	2005
			Lead	2005
			Zinc	2005
	Mouth of Chollas Creek	San Diego Bay Shoreline, near Chollas Creek	Benthic Community Effects	2006
			Sediment Toxicity	2006
	NASSCO and Southwest Marine	San Diego Bay Shoreline, between Sampson and 28th Streets	Copper	2005
			Mercury	2006
			PAHs	2006