

Agenda Item 6

State and Federal Workplans
Related to TMDLs

SFY 1999-2000 State Funds TMDL Consolidated Work Plan

Beginning this fiscal year the State has dedicated funds to the development of Total Maximum Daily Loads, as required by the federal Clean Water Act. This work plan has been developed to assist in managing this effort. It contains brief descriptions of the work intended to be completed with the available funding by the Regional Boards and the Division of Water Quality (DWQ) using State General Funds provided as baseline allocations for TMDL development. The work plan only covers work anticipated for the current fiscal year. A summary table of the projects being supported with these funds is provided below. Each Regional Board and DWQ have contributed a section to this consolidated work plan. Total projected expenditures are approximately \$2.6 million. Additional contract resources will be made available and are not accounted for in this work plan. Where contract dollars are identified in this document they represent first approximations of contract needs. As contract resources are distributed and contracts developed a separate report will be developed.

The dollar amounts identified in this work plan are not consistent with the dollars displayed in BDAS due to a difference in the accounting and distribution of indirect costs. Rather than delay the compilation and release of this work plan in order to reconcile the differences, we are releasing the work plan now. Because of the importance of the TMDL work, management has also directed that the work be staffed at the authorized staffing level, and that any adjustments to account for indirect costs will be accomplished later as actual costs become clear. Accordingly, the work described herein is based on a total of 30.5 PYs (includes Region 6 allocation).

With the exception of Region 6, work for all regions and DWQ is accounted for in this work plan. In several situations State funding is being used in conjunction with federal grant funding to provide adequate support for needed activities. Work conducted pursuant to this work plan may produce products in this fiscal year and may also contribute to products scheduled for completion in future years. Not all work identified in this work plan results in a product in the current fiscal year. This work plan does not describe all TMDL work undertaken by the regions and DWQ. Region 6 is revising its work plan and the revised version was not available in time to include in this draft.

WORK PLAN SUMMARY.

Organization	Contract Allocation	Project Title	Budgeted Dollars*	Page ref.
Reg. 1	\$200,000	TMDL outreach & coordination in multiple watersheds	\$55,489	4
		Basin Plan amendment for Regional Implementation Plan for sediment TMDLs	\$197,066	5
Reg. 2	\$200,000	Region-wide sediment TMDL	\$98,000	8
		PCBs TMDL for S.F. Bay	\$21,000	9
		Mercury TMDL for S.F. Bay	\$56,000	11
		Diazinon TMDL for Urban Creeks	\$21,000	14
		Sediment TMDL for Napa R.	\$56,000	16
		Pathogen TMDL for Tomales Bay	\$98,000	19
Reg. 3	\$200,000	SLO Cr. Bacterial indicators	\$20,000	22
		SLO Cr. Priority Pollutants	\$20,000	22
		Morro Bay/Los Osos Cr. Priority Pollutants	\$20,000	22
		Valencia/Aptos Creeks, Priority Pollutants	\$35,000	22
		Regional and State Coordination	\$20,000	22
		Morro Bay metals	\$20,000	22
		San Lorenzo R. Pathogens	\$40,000	22
		Salinas R. siltation	\$25,000	23
		Pajaro R. nutrients	\$15,000	23
		Pajaro R. siltation	\$15,000	23
		Salinas R. Pesticide, nutrient, salinity	\$30,000	23
		Pajaro R metals	\$20,000	24
		Pajaro R. oil, grease, pesticides	\$20,000	24
Reg. 4	\$200,000	Callegus Cr., chloride	\$40,000	28
		Malibu Cr., nutrients	\$94,000	31
		L.A. River, trash	\$40,000	33
		Ballona Cr., trash	\$40,000	36
		Callegus Cr., nutrients	\$60,000	39
		San Gabriel R., nutrients	\$11,000	42
		San Gabriel R., metals	\$7,000	44
		Santa Clara R., nitrogen	\$11,000	46
		McGrath Beach, coliform	\$7,000	48
Reg. 5	\$200,000	Sacramento and Stockton Urban Creeks OP Pesticides	\$100,000	50
		San Joaquin R/Sac R. Delta OP Pesticides	\$200,000	53
		San Joaquin R Selenium	\$100,000	56

Reg. 6	\$200,000	Pending		
Reg. 7	\$200,000	Agricultural TMDL Implementation Plan	\$100,000	58
		Water Quality Monitoring/Staff support	\$70,000	59
		Technical TMDL, mapping New/Alamo Rivers	\$30,000	60
Reg. 8	\$125,000	TMDL Coordination Activities	\$30,000	62
		Big Bear Lake, nutrients	\$110,000	63
		Lake Elsinore/Canyon Lake, nutrients	\$110,000	66
Reg. 9	\$38,000	Chollas Cr./S.D. Bay, Diazinon	\$105,000	71
		Rainbow Cr.	\$145,000	76
DWQ	\$80,000	Rule making	\$100,000	80
		TMDL Tracking and reporting	\$100,000	81
		Citizen Volunteer Water Quality Monitoring Coordinators	\$300,000	83
		Total Staff Project Budget all organizations	2,812,555	

- Budget dollars are based on average PY cost of \$100,000/PY.

Region 1

Regional SFY 1999/00 Contract allocation; \$200,000

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1. Project Title

TMDL Coordination/Outreach (Big, Mattole, Trinity, Klamath watersheds)

2. Description

Multiple-standard TMDLs are to be promulgated for these basins over the next five years. USEPA will promulgate the Trinity basin TMDLs through their process, but without implementation plans. The Trinity and Klamath watersheds are affected by the CalFed process (The Trinity River is an element of the Central Valley Project.), by California-Oregon interstate issues (including Bureau of Reclamation-sponsored irrigation development and ESA-salmonid fishery sub-issues), by Federal Energy Regulatory Commission functions (Klamath River has a major re-licensing project underway) and by Indian Tribal issues. The Big and Mattole rivers are north coastal streams with forestry and grazing issues, listed fish species and multiple agency considerations. Regional Board must begin commitment of staff resources to assessment and outreach tasks so that the various processes are coordinated.

Hydrologic Unit Description:

Please refer to Section 2 of the North Coast Regional WMI Chapter.

3. Purpose/Objectives

The purpose is to begin the extensive coordination needed to craft sediment, temperature and nutrient TMDLs for these complex watersheds.

Objectives are to:

- a. Develop staff expertise and interagency contacts.
- b. Prepare Atlas and Workplan to guide follow-on activities.
- c. Conduct the TMDL-preparations work in concert with other Agency actions in the watersheds in the period FY 1999 through 2004.

4. Tasks

- a. Orient staff to Basin hydrology, culture and water quality issues.
- b. Prepare Atlas of Basin agencies and projects.

- c. Integrate Regional Board WQ Assessments into other Agencies' Projects.
- d. Coordinate TMDL preparation with other Agencies.

5. Budget/Products/Completion Dates

Task	Staff Resources (\$\$)	Contracts (\$)	Products	Completion Dates
A	\$12,000		Staff Orientation	
B	\$21,400		Prepare Basin Atlas	
C	\$9,500		Interagency Integration	
D	\$12,589		TMDL Workplanning	
	\$55,489	Total FY 1999-00 Budget		

1. Project Title

Regional Basin Plan Implementation Plan for Sediment TMDLs

2. Description

Over the next eight (8) years the North Coast Region will see up to 16 sediment TMDLs developed. Each one requires implementation, best accomplished through a Basin Plan Implementation Plan. Since controlling sediment discharges is the issue for the implementation plans and the measures to control those discharges are the same regardless of location in the region, we will develop a regional approach to implementation of sedimentation controls.

This approach will result in a single Basin Plan amendment to address sediment control issues in all sediment TMDL watersheds. As TMDLs are developed, individual implementation plans will reference the pertinent portions of the regional implementation plan. In this fashion the work to develop implementation is reduced on a by-watershed basis, and individual watershed TMDL implementations are tailored to the watershed.

This effort will require a team of staff to survey other regions' approaches to sediment TMDL implementation, craft the regional implementation measures using existing plans (like the Garcia and Redwood) and ideas from other regions, perform multiple reviews (including other regions), and propose a Basin Plan amendment for Regional Water Board consideration.

Hydrologic Unit Description:

This is a region-wide effort. Individual descriptions will be included in individual TMDLs.

3. Purpose/Objectives

A regional implementation plan for sediment controls will streamline the implementation of sediment TMDLs in the region, saving staff time and the public's resources by focussing the effort on a set of measures that can be referenced in individual TMDLs.

Objectives are to:

- a. Develop a regional approach to sediment controls for implementation of TMDLs
- b. Perform public participation
- c. Amend the Basin Plan to incorporate the regional implementation plan

4. Tasks

- a. Survey other regions' approaches to sediment TMDL implementation
- b. Craft regional implementation strategy using existing plans (like the Garcia and Redwood) and ideas from other regions
- c. perform multiple in-house reviews
- d. perform interagency review (including other regions)
- e. conduct public participation
- f. propose a Basin Plan amendment for Regional Water Board consideration

5. Budget/Products/Completion Dates

Task	Staff Resources (\$\$)	Contracts (\$)	Products	Completion Dates
A	\$ 11,896		Survey other regions	
B	\$ 31,897		Prepare regional strategy	
C	\$ 33,792		In-house reviews	
D	\$ 31,896		Interagency coordination/reviews	
E	\$ 54,741		Public participation	
F	\$ 32,844		Propose Basin Plan Amendment to Regional Water Board for consideration	
	\$197,066	Total FY 1999-00 Budget		

Note: This is our best estimate of staff expenditures. The unknowns are how many hearings and how much public comment and controversy will result. If we have over-estimated the need, we will include other currently unfunded TMDL tasks consistent with the TMDL schedule and strategy for the region.

Region 2

Regional SFY 1999/00 Contract allocation; \$200,000

1. Project Title

Regionwide Sediment TMDLs

2. Description

Numerous water bodies in the San Francisco Bay Region are listed as impaired due to excessive siltation/sedimentation. Consequently, sediments TMDLs including implementation plans are required to remedy the impairments. A regional approach to this challenge (versus one watershed at a time) provides economies of scale in terms of both resources and time. The regional approach is founded on the premise that sub-watershed areas with common attributes that influent sediment input (geology, vegetation, land use, and topography) can be defined and characterized. Characterization and assessment of representative sub-watershed areas will provide reference states, a quantitative understanding of sediment production and its relationship to habitat quality, and a basis for distinguishing sediment associated with natural processes from sediment from land-use activities.

3. Purposes/Objectives

The objective of the proposed activities is to establish a framework for developing Sediment TMDLs. This will include establishing numerical indicators that link sediment loading to stream habitat conditions and a demonstrated procedure for conducting rapid sediment budgets.

4. Tasks

a. Classification Scheme

Establish watershed, sub-watershed, and reach classification scheme.

b. Stream Channel and Habitat Assessment

Establish relationships between sediment-input rate, channel transport capacity, and sediment-related habitat condition (e.g., gravel permeability at spawning sites, sediment deposition in pools) within the classification scheme.

c. Rapid Sediment Budgets

Establish and demonstrate procedures to conduct rapid sediment budgets.

5. Budget/Products/Completion Dates

Tasks, Products, and Completion Dates are included in the following table. Budget for tasks to be funded in FY 1999/00 is also included.

Task	Staff Resources	Contracts	Products	Completion Dates
A	\$14,000		Stream Classification Scheme Report	June 2000
B	\$42,000	\$100,000	Habitat Indicator Progress Report	June 2000
			Habitat Indicator Report	June 2001
C	\$42,000	\$100,000	Rapid Sediment Budget Progress Report	June 2000
			Rapid Sediment Budget Report	June 2001

1. Project Title

PCBs TMDL for San Francisco Bay

2. Description

Hydrologic Unit Description: #'s 203-207

All San Francisco Bay segments, all of which are UWA Priority Category I Watersheds, are listed as impaired due to PCBs. Development of a TMDL will begin in FY 1999/00, and a technical TMDL is scheduled for completion in June 2002. This workplan is for activities in associated with implementation plan development. Related activities scheduled for FY1999/00 covered by federal 106 resources include review of the basis for assessment and development of a conceptual model and source analysis.

3. Purposes/Objectives

The objective of the proposed activities is to develop a TMDL that will resolve impairment of all San Francisco Bay segments due to PCBs.

4. Tasks

a. Problem Statement

Review and refine listing basis to confirm or resolve numerical thresholds used for interim health advisory for fish (use of total PCBs, versus Aroclor mixtures, versus individual congeners).

b. Numeric Target

- i. Develop conceptual model that describes the relevant process that affect PCBs loading, fate, and transport in San Francisco Bay.**
- ii. Identify and fill critical information gaps.**
- iii. Develop appropriate quantitative model for TMDL development.**
- iv. Develop TMDL for PCBs in San Francisco Bay, including linkage analysis.**

c. Source Analysis

Identify and characterize sources and associated loadings of PCBs to San Francisco Bay.

d. Allocations

- i. Evaluate allocation alternatives**
- ii. Establish TMDL allocations, including margin of safety.**

e. Linkage Analysis

See Numeric Target

f. Margin of Safety

See Allocations

g. Technical TMDL Report

Produce Technical TMDL Report that includes assemblage of results of Tasks a-f.

h. Stakeholder Participation

Establish and maintain stakeholder forum to provide advice and support for TMDL development and Implementation Plan.

i. Implementation Plan

- i. Identify and evaluate TMDL implementation alternatives.**
- ii. Establish implementation plan and schedule**

j. Monitoring/Re-evaluation

Establish monitoring plan to evaluate effectiveness of TMDL and Implementation Plan.

k. Staff Workshops

See Regional Board Hearings.

l. Notice of Filing/Hearing

See Regional Board Hearings.

m. Regional Board Hearing

Conduct Regional Board process for consideration of Basin Plan amendments to adopt TMDL and Implementation Plan.

5. Budget/Products/Completion Dates

Tasks, Products, and Completion Dates are included in the following table. Budget for tasks to be funded in FY 1999/00 is also included.

Task	Staff Resources	Contracts	Products	Completion Dates
a	Fed 106	\$50,000	Impairment Assessment Report	June 2000
b.i	Fed 106		Conceptual Model Report	June 2000
b.ii			Information Gap Report	June 2001
b.iii			Quantitative Model Report	January 2002
b.iv			TMDL	June 2002
c	Fed 106	\$50,000	Sources and Loadings Progress Report	June 2000
			Sources and Loadings Final Report	June 2001
d.i			Allocation Alternatives Report	January 2002
d.ii			Allocations Report	June 2002
g			Technical TMDL Report	June 2002
h	\$14,000		Stakeholder Meeting Minutes	ongoing
i.i	\$7,000		Implementation Alternatives Progress Report	June 2000
i.ii			Implementation Plan	June 2003
j			Monitoring Plan	June 2003
m			Basin Plan Amendment	June 2004

1. Project Title

Mercury TMDL for San Francisco Bay

2. Description

Hydrologic Unit Description: #'s 203-207

All San Francisco Bay segments, all of which are UWA Priority Category I Watersheds, are listed as impaired due to Mercury. Development of a TMDL began in FY 1998/99, and a technical TMDL is scheduled for completion in June 2000. Activities scheduled for FY1999/00 include completion of the Technical TMDL Report and continue work on an implementation plan.

3. Purposes/Objectives

The objective of the proposed activities is to develop a TMDL that will resolve impairment of all San Francisco Bay segments due to Mercury.

4. Tasks

a. Problem Statement

Review and refine listing basis to confirm or resolve numerical thresholds used for health advisory for fish including consideration of potential water quality objectives.

b. Numeric Target

- i. Develop conceptual model that describes the relevant process that affect Mercury loading, fate, and transport in San Francisco Bay.**
- ii. Identify and fill critical information gaps.**
- iii. Develop appropriate quantitative model for TMDL development.**
- iv. Develop TMDL for Mercury in San Francisco Bay, including linkage analysis.**

c. Source Analysis

Expand and refine identification and characterization of sources and associated loadings of Mercury to San Francisco Bay.

d. Allocations

- i. Evaluate allocation alternatives**
- ii. Establish TMDL allocations, including margin of safety.**

e. Linkage Analysis

See Numeric Target

f. Margin of Safety

See Allocations

g. Technical TMDL Report

Produce Technical TMDL Report that includes assemblage of results of Tasks a-f.

h. Stakeholder Participation

Establish and maintain stakeholder forum to provide advice and support for TMDL development and Implementation Plan.

i. Implementation Plan

i. Identify and evaluate TMDL implementation alternatives.

ii. Establish implementation plan and schedule

j. Monitoring/Re-evaluation

Establish monitoring plan to evaluate effectiveness of TMDL and Implementation Plan.

k. Staff Workshops

See Regional Board Hearings.

l. Notice of Filing/Hearing

See Regional Board Hearings.

m. Regional Board Hearing

Conduct Regional Board process for consideration of Basin Plan amendments to adopt TMDL and Implementation Plan.

5. Budget/Products/Completion Dates

Tasks, Products, and Completion Dates are included in the following table. Budget for tasks to be funded in FY 1999/00 is also included.

Task	Staff Resources	Contracts	Products	Completion Dates
a			Impairment Assessment Report	
b.i			Conceptual Model Report	

b.ii			Information Gap Report	
b.iii			Quantitative Model Report	
b.iv			TMDL	
c	\$21,000		Sources and Loadings Report	June 2000
d.i			Allocation Alternatives Report	
d.ii			Allocations Report	
g			Technical TMDL Report	June 2000
h	\$14,000		Stakeholder Meeting Minutes	ongoing
i.i	\$21,000		Implementation Alternatives Report	June 2000
i.ii			Implementation Plan	June 2001
j			Monitoring Plan	June 2001
m			Basin Plan Amendment	June 2002

1. Project Title

Diazinon TMDLs for Urban Creeks in the San Francisco Bay Region

2. Description

Hydrologic Unit Description: #'s 203-207

Urban creeks in the San Francisco Region, all of which are UWA Priority Category I Watersheds, are listed as impaired due to Diazinon, an organophosphate pesticide. Development of TMDLs will begin in FY 1999/00, and technical TMDLs are scheduled for completion in June 2002. This workplan is for activities in associated with implementation plan development. Related activities scheduled for FY1999/00 covered by federal 106 resources include review of the basis for assessment and source analysis.

3. Purposes/Objectives

The objective of the proposed activities is to develop TMDLs that will resolve impairment of urban creeks in the San Francisco Bay Region due to diazinon.

4. Tasks

a. Problem Statement

- i. Establish appropriate environmental indicator for diazinon caused toxicity.**
- ii. Revise assessment and listing of urban creeks**

b. Numeric Target

- i. Develop conceptual model that describes the relevant process that affect diazinon loading, fate, and transport in urban creeks.**

ii. Develop TMDLs for diazinon in urban creeks, including linkage analysis.

c. Source Analysis

Identify and characterize sources and associated loadings of diazinon to urban creeks.

d. Allocations

i. Evaluate allocation alternatives

ii. Establish TMDL allocations, including margin of safety.

e. Linkage Analysis

See Numeric Target

f. Margin of Safety

See Allocations

g. Technical TMDL Report

Produce Technical TMDL Report that includes assemblage of results of Tasks a-f.

h. Stakeholder Participation

Establish and maintain stakeholder forum to provide advice and support for TMDL development and Implementation Plan.

i. Implementation Plan

i. Identify and evaluate TMDL implementation alternatives.

ii. Establish implementation plan and schedule

j. Monitoring/Re-evaluation

Establish monitoring plan to evaluate effectiveness of TMDLs and Implementation Plan.

k. Staff Workshops

See Regional Board Hearings.

l. Notice of Filing/Hearing

See Regional Board Hearings.

m. Regional Board Hearing

Conduct Regional Board process for consideration of Basin Plan amendments to adopt TMDL and Implementation Plan.

5. Budget/Products/Completion Dates

Tasks, Products, and Completion Dates are included in the following table. Budget for tasks to be funded in FY 1999/00 is also included.

Task	Staff Resources	Contracts	Products	Completion Dates
a	Fed 106	\$50,000	Impairment Assessment Report	June 2000
b.i			Conceptual Model Report	June 2001
b.ii			TMDLs	June 2002
c	Fed 106	\$50,000	Sources and Loadings Progress Report	June 2000
			Sources and Loadings Final Report	June 2001
d.i			Allocation Alternatives Report	January 2002
d.ii			Allocations Report	June 2002
g			Technical TMDL Report	June 2002
h	\$14,000		Stakeholder Meeting Minutes	ongoing
i.i	\$7,000		Implementation Alternatives Progress Report	June 2000
i.ii			Implementation Plan	June 2003
j			Monitoring Plan	June 2003
m			Basin Plan Amendment	June 2004

1. Project Title –

Sediment TMDL for Napa River

2. Description

Hydrologic Unit Description: # 206.5

The Napa River, which is a UWA Priority Category I Watershed, is listed as impaired due to siltation. A technical TMDL for sediment is scheduled for completion in June 2003. Activities scheduled for FY1999/00 include completion of the Technical TMDL Report and continue work on an implementation plan.

3. Purposes/Objectives

The objective of the proposed activities is to develop a TMDL that will resolve impairment of the Napa River due to siltation.

4. Tasks

a. Problem Statement

Review and refine listing basis and conduct watershed assessment to confirm or refine finding of impairment due to siltation.

b. Numeric Target

Establish numeric target for sediment TMDL.

c. Source Analysis

- i. Conduct land use and ecological historical analysis**
- ii. Conduct rapid sediment budgets**

d. Allocations

- iii. Evaluate allocation alternatives**
- iv. Establish TMDL allocations, including margin of safety.**

e. Linkage Analysis

See Numeric Target

f. Margin of Safety

See Allocations

g. Technical TMDL Report

Produce Technical TMDL Report that includes assemblage of results of Tasks a-f.

h. Stakeholder Participation

Establish and maintain stakeholder forum to provide advice and support for TMDL development and Implementation Plan.

i. Implementation Plan

- i. Identify and evaluate TMDL implementation alternatives.**
- ii. Establish implementation plan and schedule**

j. Monitoring/Re-evaluation

Establish monitoring plan to evaluate effectiveness of TMDL and Implementation Plan.

k. Staff Workshops

See Regional Board Hearings.

l. Notice of Filing/Hearing

See Regional Board Hearings.

m. Regional Board Hearing

Conduct Regional Board process for consideration of Basin Plan amendments to adopt TMDL and Implementation Plan.

5. Budget/Products/Completion Dates

Tasks, Products, and Completion Dates are included in the following table. Budget for tasks to be funded in FY 1999/00 is also included.

Task	Staff Resources	Contracts	Products	Completion Dates
a	\$21,000	\$50,000	Impairment Assessment Progress Report	June 2000
			Impairment Assessment Report	June 2002
b			TMDL Numeric Target	June 2003
c	\$21,000	\$50,000	Source Analysis Progress Report	June 2000
			Source Analysis Report	June 2002
d.i			Allocation Alternatives Report	June 2003
d.ii			Allocations Report	June 2003
g			Technical TMDL Report	June 2003
h	\$14,000		Stakeholder Meeting Minutes	Ongoing
i.i			Implementation Alternatives Report	June 2003
i.ii			Implementation Plan	June 2003
j			Monitoring Plan	June 2003
m			Basin Plan Amendment	June 2004

1. Project Title

Pathogens TMDL for Tomales Bay

2. Description

Hydrologic Unit Description: #'s 201.11

Tomales Bay, a UWA Priority Category I Watershed, is listed as impaired due to Pathogens. Development of a TMDL including an implementation plan will begin in FY 1999/00 with completion by June 2004. Activities scheduled for FY 1999/00 include Source Analysis, Stakeholder Participation, and Implementation Plan development.

3. Purposes/Objectives

The objective of the proposed activities is to develop a TMDL that will resolve impairment of all Tomales Bay due to Pathogens.

4. Tasks

a. Problem Statement

Review listing basis and refine if appropriate.

b. Numeric Target

- i. Develop conceptual model that describes the relevant process that affect Pathogens loading, fate, and transport in Tomales Bay.**
- ii. Identify and fill critical information gaps.**
- iii. Develop appropriate quantitative model for TMDL development.**
- iv. Develop TMDL for Pathogens in Tomales Bay, including linkage analysis.**

c. Source Analysis

Identify and characterize sources and associated loadings of Pathogens to Tomales Bay.

d. Allocations

- i. Evaluate allocation alternatives**
 - ii. Establish TMDL allocations, including margin of safety.**
- e. Linkage Analysis**

See Numeric Target
- f. Margin of Safety**

See Allocations
- g. Technical TMDL Report**

Produce Technical TMDL Report that includes assemblage of results of Tasks a-f.
- h. Stakeholder Participation**

Establish and maintain stakeholder forum to provide advice and support for TMDL development and Implementation Plan.
- i. Implementation Plan**
 - i. Identify and evaluate TMDL implementation alternatives.**
 - ii. Establish implementation plan and schedule**
- j. Monitoring/Re-evaluation**

Establish monitoring plan to evaluate effectiveness of TMDL and Implementation Plan.
- k. Staff Workshops**

See Regional Board Hearings.
- l. Notice of Filing/Hearing**

See Regional Board Hearings.
- m. Regional Board Hearing**

Conduct Regional Board process for consideration of Basin Plan amendments to adopt TMDL and Implementation Plan.

5. Budget/Products/Completion Dates

Tasks, Products, and Completion Dates are included in the following table. Budget for tasks to be funded in FY 1999/00 is also included.

Task	Staff Resources	Contracts	Products	Completion Dates
a				
b.i			Conceptual Model Report	June 2000
b.ii			Information Gap Report	June 2001
b.iii			Quantitative Model Report	January 2002
b.iv			TMDL	June 2002
c	\$70,000	\$50,000	Sources and Loadings Progress Report	June 2000
			Sources and Loadings Final Report	June 2001
d.i			Allocation Alternatives Report	January 2002
d.ii			Allocations Report	June 2002
g			Technical TMDL Report	June 2002
h	\$14,000		Stakeholder Meeting Minutes	ongoing
i.i	\$14,000		Implementation Alternatives Progress Report	June 2000
i.ii			Implementation Plan	June 2003
j			Monitoring Plan	June 2003
m			Basin Plan Amendment	June 2004

Region 3

Regional SFY 1999/00 Contract allocation; \$200,000

Information in bold indicates work on projects to be performed as part of this Workplan. Information in regular font indicates related work on the projects NOT funded by this workplan (other funding sources shown in the “Fund or PCA” column and with footnotes). The word “NEW” in the “Fund or PCA” column refers to the state-funded staff resources allocated to Region 3 (3 PYs) that are the subject of this Workplan. The numbers in brackets, [], in the “Contract \$” column, indicate needed contract funds associated with each project.

Project*	Task	Staff PY or \$	Fund or PCA	Con- tract \$	Fund	Du Da
San Luis Obispo Creek Watershed Nutrients (FY 99-00 Commitment)	Complete Technical TMDL (Tasks a-g)	0.3	402			6/
	Supplemental Monitoring Begin Implementation Planning	0.2	111	[10K]	?	6/
San Luis Obispo Creek Watershed Bacteria	Perform a “monitored assessment” Stakeholder involvement	0.2	NEW	[10K]	?	6/
San Luis Obispo Creek Watershed Priority Pollutants	Perform a “monitored assessment” in conjunction with bacteria Stakeholder involvement	0.2	NEW	[10K]	?	6/
Morro Bay Watershed (Los Osos Creek) Priority Pollutants	Perform a “monitored assessment”	2.0	NEW	[10K]	?	6/
Valencia and Aptos Creeks Sediment	Develop Problem Statement (Task a); Develop Workplan and Strategy for Completion of other TMDL Components (e.g. contract or interagency agreement) (Tasks b-g); Establish and Facilitate Management Structure for Stakeholder Involvement (e.g. TAC/CAC, Consider “Blue Circle”; Task h)	0.3	NEW	[30K]	?	6/
Region and State Coordination	Roundtable, Guidance Development, Tracking Progress, Training etc.	10K ¹ 0.2	319 NEW			6/ 6/
Morro Bay and Chorro Creek) Metals	Develop TMDL Components (Tasks)	0.4	NEW	[10K]		6/
Morro Bay (Bay) Metals	Perform “monitored assessment”	0.2	NEW	[10K]	?	6/
San Lorenzo River Watershed	Develop TMDL Components (Tasks a- g) and Write Technical TMDL Report	0.4	NEW			6/

Project*	Task	Staff PY or \$	Fund or PCA	Con- tract \$	Fund	Du Da
Pathogens						
Salinas River Watershed Siltation	Develop Problem Statement (Task a), Establish and Manage Contract for other TMDL Components (Tasks b-g), Establish and Facilitate Management Structure for Stakeholder Involvement (e.g. TAC/CAC for Contract; Task h)	25K ¹ 0.25	319 NEW	100K ₂ [300 K]	319 ?	6/
	Complete Technical TMDL Report including all products associated with Contract to produce TMDL Components (Tasks a-g), Continue to Facilitate Management Structure and begin Implementation Planning (Tasks h and i)	50K ³		75K ³ [150 K]	?	6/
Pajaro River Watershed Nutrients	Develop Problem Statement (Task a), Establish and Manage Contract for other TMDL Components (Tasks b-g), Establish and Facilitate Management Structure for Stakeholder Involvement (e.g. TAC/CAC for Contract; Task h)	25K ¹ 0.15	319 NEW	50K ¹		6/
Pajaro River Watershed Siltation (including Watsonville Slough)	Develop Problem Statement (Task a), Establish and Manage Contract for other TMDL Components (Tasks b-g), Establish and Facilitate Management Structure for Stakeholder Involvement (e.g. TAC/CAC for Contract; Task h)	25K ¹ 0.15	319 NEW	50K ¹ [350 K]	319 ?	6/
	Complete Technical TMDL Report including all products associated with Contract to produce TMDL Components (Tasks a-g), Continue to Facilitate Management Structure and begin Implementation Planning (Tasks h and i)	25K ³		100K ₃		6/
Salinas River Watershed Pesticides, Nutrients and Salinity (including Blanco Drain and Salinas Reclamation Canal)	Initiate development of Problem Statement and Stakeholder Involvement (Task a and h); (Tasks b-g); Establish and Facilitate Management Structure for Stakeholder Involvement (e.g. TAC/CAC; Task h)	0.3	NEW	[30K] nut. [50K] pest.	? ?	6/
	Develop Problem Statement (Task a); Develop Workplan and Strategy for Completion of other TMDL Components (e.g. contract or interagency agreement)	[0.3]	?	[300 K]	?	6/
	Complete Technical TMDL Report;					6/

Project*	Task	Staff PY or \$	Fund or PCA	Con- tract \$	Fund	Du Da
	Continue to Facilitate Management Structure and begin Implementation Planning (Tasks h and i)					
Pajaro River Watershed (Clear Creek and Hernandez Reservoir) Metals	Initiate development of Problem Statement and Stakeholder Involvement (Task a and h);	0.2	NEW			6/0
	Develop Problem Statement (Task a); Develop Workplan and Strategy for Completion of other TMDL Components (e.g. contract or interagency agreement) (Tasks b-g); Establish and Facilitate Management Structure for Stakeholder Involvement (e.g. TAC/CAC; Task h)	[0.2]	?	[100 K]	?	6/0 6/0
Pajaro River Watershed (Watsonville Slough) Oil and Grease and Pesticides	Initiate development of Problem Statement and Stakeholder Involvement (Task a and h);	0.2	NEW	[20K] O&G [40K] pest.	?	6/0
	Develop Problem Statement (Task a); Develop Workplan and Strategy for Completion of other TMDL Components (e.g. contract or interagency agreement) (Tasks b-g); Establish and Facilitate Management Structure for Stakeholder Involvement (e.g. TAC/CAC; Task h)	[0.2]	?	[200 K]	?	6/0 6/0

1. Federal FY 99-00 Funds (\$375 K allocation to Reg. 3)
2. State FY 98-99 Funds (Bond funds discussed with Stefan, see attached draft (very rough) proposal outline)
3. Federal FY 00-01 Funds (assuming another \$375 K to Reg. 3)

Explanation of Tasks

a. Problem Statement

The objective of problem identification is to identify the key factors and background information for a listed waterbody that describe the nature of the impairment and the context for the TMDL. Regional Board staff will develop and write a problem statement based on existing and new information collected and developed for the watershed and/or the specific TMDL.

b. Numeric Target

When the standard is a narrative, it must be interpreted quantitatively in order to provide a numeric target(s) for the TMDL. The purpose of this component is to identify measurable indicators and target values that can be used to evaluate the TMDL and attainment of water quality standards. Multiple indicators can be used, to provide a stronger basis for assessing attainment of standards. Regional Board staff, or a contractor managed by staff, will develop and write numeric targets based on existing information.

c. Source Analysis

The purpose of the source analysis is to demonstrate that all pollutant sources have been considered, and significant sources estimated, in order to help determine the degree of pollutant reductions needed to meet numeric targets and allocation of pollutant allowances among sources. Regional Board staff, or a contractor managed by staff, will develop and write up the sources and analysis methods based on existing information.

d. Allocations

A TMDL is defined as the sum of the individual waste load allocations for point sources, load allocations for nonpoint sources and natural background pollutants or analysis of controls needed to attain needed load reductions. Allocations may be assigned in a variety of ways (e.g. discharger sector, land use), but the relationship must be explained. Regional Board staff, or a contractor managed by staff, will develop best estimates for allocations based on existing. Development and description of the allocations will include e. and f., as follows.

e. Linkage Analysis

In order to develop a TMDL, a linkage must be defined between the numeric targets and the loading capacity. This linkage demonstrates how allocations attain standards. Linkage may be based on information from within the watershed, or in similar watersheds, on established practices. Regional Board staff will insure this is included in task d. above.

f. Margin of Safety

TMDLs must be established at levels necessary to attain and maintain the applicable narrative and numerical water quality standards with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality. The margin of safety can either be incorporated implicitly through conservative analytical approaches and assumptions used to develop the TMDL or added explicitly as a separate component of the TMDL. Given the uncertainties in developing TMDLs for large watersheds, the most sensible approach would appear to be to incorporate and document conservative assumptions and approaches to be used. Regional Board staff will insure this is included in task d. above.

g. Technical TMDL Report

Regional Board staff will prepare report (assemble elements "a-f") for submittal to USEPA in a format similar to existing TMDL reports.

h. Stakeholder Participation

This task would include activities such as participation with or facilitation of stakeholder groups to be involved in technical TMDL development, implementation planning, monitoring and implementation of management measures. Current public participation forums will be used for stakeholder participation in TMDL development and implementation planning, if possible. If new forums are needed, Regional Board staff, or a contractor managed by staff, will establish them to proceed with stakeholder participation.

i. Implementation Plan

Regional Board staff, or a contractor managed by staff, will develop and write an implementation plan by 1) reviewing and incorporating results of current implementation planning, 2) facilitating and focusing existing forums or new forums sponsored by the Regional Board or other watershed partners, and 3) write up the results of 1) and 2), including a phased approach to allow for implementation, monitoring, and feedback to adjust numeric targets and activities as appropriate over time.

j. Monitoring/Re-evaluation

Regional Board staff will evaluate past and current monitoring activities and continue or modify these activities as appropriate to inform the TMDL process. Results of data and information analysis will determine whether and how targets, implementation activities, etc. need to be changed.

k. Staff Workshops-

Regional Board staff will build workshops into the stakeholder participation activities described above and implement the Regional Board's existing public hearing process to address l. and m. below.

- l. Notice of Filing/Hearing**
- m. Regional Board Hearing**

Region 4

Regional SFY 1999/00 Contract allocation; \$200,000

1. Project Title

Calleguas Creek Chloride TMDL

2. Description

Mugu Lagoon, located at the mouth of the watershed, is one of the few remaining significant saltwater wetland habitats in southern California. The Calleguas Creek supports an important agricultural industry, irrigating by direct diversion of surface waters and groundwater recharge. Excessive salts threaten this beneficial use, particularly for many salt sensitive crops grown in the area. Further increases in salts will threaten other beneficial uses. This project will finalize the Chloride TMDL for Calleguas Creek. Task will include the completion of a draft implementation plan, monitoring and re-evaluation plan, staff workshops and the Regional Board hearing as well as stakeholder participation.

Hydrologic Unit Description:

Calleguas Creek is a Unified Watershed Assessment Priority.

3. Purpose/Objectives

Adoption of TMDL and approval of Basin Plan amendment for Calleguas Creek Chloride TMDL.

4. Tasks

- a. Problem Statement**
- b. Numeric Target**
- c. Source Analysis**
- d. Allocations**
- e. Linkage Analysis**
- f. Margin of Safety**
- g. Technical TMDL Report**

h. Stakeholder Participation

Stakeholder participation is an ongoing part of the TMDL process. Staff will solicit participation for tasks i, j, m.

i. Implementation Plan

In conjunction with the stakeholders an implementation plan and a strategy to develop implantation measures will be developed using the load allocations identified in task d that will meet the numeric targets from b. The implementation plan will be completed by the end of September 1999.

j. Monitoring/Re-evaluation

A monitoring program will be developed to assess the future success of the implementation measures from task i. The monitoring program will be completed by the end of September 1999.

k. Staff Workshops

The following public workshops will be conducted:

- Stakeholder workshop July 1999
- Stakeholder workshop September 1999
- Public workshop December 1999

l. Notice of Filing/Hearing

Public notice for the Regional Board Hearing will be made at least 45 days prior to the meeting date. A copy of the Draft TMDL will be sent to State Board for peer review by the end of October 1999.

m. Regional Board Hearing

The TMDL is scheduled for our February 2000 Board Meeting.

5. Budget/Products/Completion Dates

Task	Staff Resources (\$\$)	Contracts (\$)	Products	Completion Dates
A			Problem Statement Write-up	
B			Numeric Targets	
C			Source Analysis	
D			Allocations	
E			Linkage Analysis	
F			Margin of Safety	

G			Technical TMDL report	
H	\$10,000		Stakeholder Participation	
I	\$6,000		Draft Implementation Plan	11/99
J	\$6,000		Draft Monitoring/Re-evaluation	11/99
K	\$10,000		Staff Workshops	12/99
L	\$4,000		Notice of Filing	12/99
M	\$4,000		Regional Board Hearing	2/2000
	\$40,000	Total		

1. Project Title

Malibu Creek Nutrient TMDL

2. Description

Poor water quality in the lower Malibu Creek and Lagoon system has lead to excessive algae growth. We need to begin work on the nutrient TMDL for Malibu Creek. Tasks include the development of the problem statement, numeric target, and source analysis.

Hydrologic Unit Description:

Santa Monica Bay is a Unified Watershed Assessment Priority.

3. Purpose/Objectives

Adoption of nutrient TMDL for Malibu Creek.

4. Tasks

a. Problem Statement

This issue is very high profile, political and controversial. Expected sources include point source discharges, horse properties, septic systems, birds, and urban runoff. Problem Statement is scheduled for completion in May of 2000.

b. Numeric Target

The numeric target for this TMDL will be difficult to develop. The interaction of the creek and lagoon and the cycling of nutrients has been studied for years without definitive results. Contractor support will likely be needed to develop the Numeric Target. Numeric Target is scheduled for completion in September of 2000.

c. Source Analysis

The first step in the Source Analysis will be conduct by reviewing and analyzing the following sources of data:

- Region Board Ambient water quality database
- Major NPDES permit monitoring reports
- Coordinated Stakeholder Watershed Monitoring
- Septic tank study by City of Malibu
- County Health Department beach Monitoring data
- Southern California Coastal Water Research Project

Most of the above data is in hardcopy format and will require data entry prior to analyzing. Focussed data analysis and possible data collection efforts will be

used to identify and/or confirm sources. Source Analysis is scheduled for completion in November of 2000.

- d. Allocations**
- e. Linkage Analysis**
- f. Margin of Safety**
- g. Technical TMDL Report**
- h. Stakeholder Participation**

Stakeholder participation is an ongoing part of the process through out the development of the TMDL. Staff will solicit participation for task (c).

- i. Implementation Plan**
- j. Monitoring/Re-evaluation**
- k. Staff Workshops**
- l. Notice of Filing/Hearing**
- m. Regional Board Hearing**

5. Budget/Products/Completion Dates

Task	Staff Resources (\$\$)	Contracts (\$)	Products	Completion Dates
a	\$20,000		Problem Statement Write-up	May 2000
b	\$40,000	\$120,000	Numeric Targets	September 2000
c	\$24,000		Source Analysis	November 2000
d			Allocations	
e			Linkage Analysis	
f			Margin of Safety	
g			Technical TMDL report	
h	\$10,000		Stakeholder Participation	
i			Draft Implementation Plan	
j			Draft Monitoring/Re-evaluation	
k			Staff Workshops	
l			Notice of Filing	
m			Regional Board Hearing	
	\$94,000	Total		

1. Project Title

Los Angeles River Trash TMDL

2. Description

The Los Angeles River Watershed is one of our most diverse watersheds in terms of land use patterns; the river travels 55 miles from the headwaters to the Pacific Ocean between the city of Long Beach and the Port of Long Beach. Approximately 324 square miles of the watershed are covered by forest or open space land including the area near the headwaters, which originates in the Santa Monica, Santa Susana, and San Gabriel Mountains. The rest of the watershed is highly developed. Due, in part, to this development, the river is impacted by a large amount of trash. The funding for this project would finalize a Trash TMDL for Los Angeles River. Task include the completion of Source Quantification, development of load allocations, development of an implementation plan, preparation of draft final document, conduct public workshops, and Regional Board hearing.

Hydrologic Unit Description:

The Los Angeles River is a California Unified Watershed Assessment Priority.

3. Purpose/Objectives

Adoption of Trash TMDL for Los Angeles River.

4. Tasks

- a. Problem Statement**
- b. Numeric Target**
- c. Source Analysis**
- d. Allocations**
- e. Linkage Analysis**
- f. Margin of Safety**
- g. Technical TMDL Report**
- h. Stakeholder Participation**

Stakeholder participation is an ongoing part of the process through out the development of the TMDL. Staff will solicit participation for tasks i, j, m.

i. Implementation Plan

In conjunction with the stakeholders an implementation plan and a strategy to develop implantation measures will be developed using the load allocations identified in task d that will meet the numeric targets from b. The draft implementation plan will be completed by the end of March 2000.

j. Monitoring/Re-evaluation

A monitoring program will be developed to assess the success of the implementation measures from task i. The monitoring program will be completed by the end of March 2000.

k. Staff Workshops

The following public workshops will be conducted:
Public Workshop April 2000

l. Notice of Filing/Hearing

Public notice for the Regional Board Hearing will be made at least 45 days prior to the meeting date. A copy of the Draft TMDL will be sent to State Board for peer review by the end of May 2000.

m. Regional Board Hearing

The TMDL is scheduled for our August 2000 Board Meeting.

5. Budget/Products/Completion Dates

The trash TMDL for the Los Angeles River and Ballona Creek are being done concurrently, allowing for a substantial amount of cost sharing between the two TMDLs.

Task	Staff Resources (\$\$)	Contracts (\$)	Products	Completion Dates
a			Problem Statement Write-up	
b			Numeric Targets	
c			Source Analysis	
d			Allocations	
e			Linkage Analysis	
f			Margin of Safety	
g			Technical TMDL report	

h	\$10,000		Stakeholder Participation	
i	\$6,000		Draft Implementation Plan	March 2000
j	\$6,000		Draft Monitoring/Re-evaluation	March 2000
k	\$10,000		Staff Workshops	April 2000
l	\$4,000		Notice of Filing	May 2000
m	\$4,000		Regional Board Hearing	August 2000
	\$40,000	Total		

1. Project Title

Ballona Creek Trash TMDL

2. Description

Much of Ballona Creek is underground or an open concrete channel until it reaches the estuarine portion, which has a soft bottom. While at one time it drained into a large wetlands complex, it now has no direct connection to the few wetlands remaining in the area although tide gates exist in the channel which connect to portions of the Ballona Wetlands. However, Ballona Creek may more often affect the nearby wetlands due to wave action moving trash, suspended material and dissolved contaminants from the ocean to the nearby Ballona Wetlands and Marina Del Rey Harbor within which complex Ballona Lagoon is located.

The following tasks are needed to finalize Trash TMDL for Ballona Creek. Tasks will include the completion of Source Quantification, development of load allocations, development of an implementation plan, preparation of a draft final document, conduct public workshops, and preparation for Board presentation.

Hydrologic Unit Description:

Ballona Creek (as part of Santa Monica Bay) is a California Unified Watershed Assessment Priority.

3. Purpose/Objectives

Adoption of a Trash TMDL for Ballona Creek.

4. Tasks

- a. Problem Statement**
- b. Numeric Target**
- c. Source Analysis**
- d. Allocations**
- e. Linkage Analysis**
- f. Margin of Safety**
- g. Technical TMDL Report**

F			Margin of Safety	
G			Technical TMDL report	
H	\$10,000		Stakeholder Participation	
I	\$6,000		Draft Implementation Plan	March 2000
J	\$6,000		Draft Monitoring/Re-evaluation	March 2000
K	\$10,000		Staff Workshops	April 2000
L	\$4,000		Notice of Filing	May 2000
M	\$4,000		Regional Board Hearing	August 2000
	\$40,000	Total		

1. Project Title

Calleguas Creek Nutrient TMDL

2. Description

Land uses vary throughout the watershed and include urban developments, golf courses and agriculture. Aquatic life in both Mugu Lagoon, one of the few remaining significant saltwater wetland habitats in southern California, and the inland streams of this watershed has been impacted by pollutants from non-point sources. Specifically, high levels of nitrates as well as other pollutants are common in the water column as well as in groundwater. Tasks will include completion of the problem statement, numeric target and source analysis as well as stakeholder participation.

Hydrologic Unit Description:

Calleguas Creek is a Unified Watershed Assessment Priority.

3. Purpose/Objectives

Adoption of TMDL and approval of Basin Plan amendment for Calleguas Creek Nutrient TMDL.

4. Tasks

a. Problem Statement

Expected sources include urban runoff, golf courses, agriculture and point source discharges. Problem Statement is scheduled for completion in June 2000.

b. Numeric Target

The numeric target for this TMDL will be difficult to develop, though some lessons may be learned from a similar effort underway for Malibu Lagoon. The interaction of the creek and lagoon and the cycling of nutrients makes translating the narrative standard in the Basin Plan into a numeric target complex. The Numeric Target is scheduled for completion in September of 2000.

c. Source Analysis

Source Analysis was/will be conduct by reviewing and analyzing the following sources of data:

- Region Board Ambient Water Quality Database
- Major NPDES permit monitoring reports
- USGS monitoring and flow data

- United Water Company monitoring data
 - Calleguas Watershed Group Characterization Study
- Source analysis is scheduled for completion in November 2000.

- d. Allocations**
- e. Linkage Analysis**
- f. Margin of Safety**
- g. Technical TMDL Report**
- h. Stakeholder Participation**

Stakeholder participation is an ongoing part of the TMDL process. Staff will solicit participation for tasks b and c.

- i. Implementation Plan**
- j. Monitoring/Re-evaluation**
- k. Staff Workshops**
- l. Notice of Filing/Hearing**
- m. Regional Board Hearing**

5. Budget/Products/Completion Dates

Task	Staff Resources (\$\$)	Contracts (\$)	Products	Completion Dates
a	\$12,000		Problem Statement Write-up	6/2000
b	\$18,000		Numeric Targets	9/2000
c	\$20,000		Source Analysis	11/2000
d			Allocations	
e			Linkage Analysis	
f			Margin of Safety	
g			Technical TMDL report	
h	\$10,000		Stakeholder Participation	
i			Draft Implementation Plan	
j			Draft Monitoring/Re-evaluation	
k			Staff Workshops	
l			Notice of Filing	
m			Regional Board Hearing	
	\$60,000	Total		

1. Project Title

San Gabriel River Nutrient TMDL

2. Description

The watershed consists of extensive areas of undisturbed riparian and woodland habitats in its upper reaches; however, portions of the upper watershed are subject to heavy recreational use. Further downstream there are dense clusters of residential and commercial activities. Nurseries, small stable areas and a large turkey farm are found along the channelized portions. Finally, tertiary effluent from several sewage treatment plants enters the river in its middle reaches. Various reaches of the river are listed as impaired due to nitrogen and its effects. Tasks will include completion of the problem statement as well as stakeholder participation.

Hydrologic Unit Description:

San Gabriel River watershed is a California Unified Watershed Assessment Priority Watershed.

3. Purpose/Objectives

Adoption of nutrient TMDL for the San Gabriel River.

4. Tasks

a. Problem Statement

Expected sources include urban runoff, nurseries, stables and other agricultural activities, and point source discharges. Problem Statement is scheduled for completion in September 2000.

b. Numeric Target

c. Source Analysis

d. Allocations

e. Linkage Analysis

f. Margin of Safety

g. Technical TMDL Report

h. Stakeholder Participation

Stakeholder participation is an ongoing part of the TMDL process. Staff will solicit participation for task (a) with these funds.

- i. Implementation Plan**
- j. Monitoring/Re-evaluation**
- k. Staff Workshops**
- l. Notice of Filing/Hearing**
- m. Regional Board Hearing**

5. Budget/Products/Completion Dates

Task	Staff Resources (\$\$)	Contracts (\$)	Products	Completion Dates
a	\$6,000		Problem Statement Write-up	9/2000
b			Numeric Targets	
c			Source Analysis	
d			Allocations	
e			Linkage Analysis	
f			Margin of Safety	
g			Technical TMDL report	
h	\$5,000		Stakeholder Participation	
i			Draft Implementation Plan	
j			Draft Monitoring/Re-evaluation	
k			Staff Workshops	
l			Notice of Filing	
m			Regional Board Hearing	
	\$11,000	Total		

1. Project Title

San Gabriel River Metals TMDL

2. Description

The watershed consists of extensive areas of undisturbed riparian and woodland habitats in its upper reaches; however, portions of the upper watershed are subject to heavy recreational use. Further downstream there are dense clusters of residential, commercial and industrial activities. Finally, tertiary effluent from several sewage treatment plants enters the river in its middle reaches. Various reaches of the river and its tributaries are listed as impaired for metals. A problem statement will be completed.

Hydrologic Unit Description:

San Gabriel River Watershed is a California Unified Watershed Assessment Priority Watershed.

3. Purpose/Objectives

Adoption of metals TMDL for the San Gabriel River.

4. Tasks

a. Problem Statement

Existing data will be reviewed to develop a problem statement, including the types of impacts observed and probable sources of the impacts. The problem statement will be completed by January 2001.

b. Numeric Target

c. Source Analysis

d. Allocations

e. Linkage Analysis

f. Margin of Safety

g. Technical TMDL Report

h. Stakeholder Participation

i. Implementation Plan

- j. Monitoring/Re-evaluation**
- k. Staff Workshops**
- l. Notice of Filing/Hearing**
- m. Regional Board Hearing**

5. Budget/Products/Completion Dates

Task	Staff Resources (\$\$)	Contracts (\$)	Products	Completion Dates
a	\$7,000		Problem Statement Write-up	1/2001
b			Numeric Targets	
c			Source Analysis	
d			Allocations	
e			Linkage Analysis	
f			Margin of Safety	
g			Technical TMDL report	
h			Stakeholder Participation	
i			Draft Implementation Plan	
j			Draft Monitoring/Re-evaluation	
k			Staff Workshops	
l			Notice of Filing	
m			Regional Board Hearing	
	\$7,000	Total		

1. Project Title

Santa Clara River Nitrogen TMDL

2. Description

Extensive patches of high quality riparian habitat are present along the length of the river and its tributaries. The river also supports an endangered fish species, is designated as a wild trout stream, and supports significant spawning and rearing habitat. A tributary to the river, Sespe Creek, is designated a wild and scenic river, and Piru and Santa Paula Creeks support good steelhead habitat. A lagoon at the mouth of the river supports a large variety of wildlife. Increasing loads of nitrogen in supplies of groundwater threaten some of these beneficial uses and others such as irrigation and drinking water. Tasks will include completion of a problem statement and stakeholder participation.

Hydrologic Unit Description:

The Santa Clara River watershed is a California Unified Assessment Priority Watershed.

3. Purpose/Objectives

Adoption of nitrogen TMDL for the Santa Clara River.

4. Tasks

a. Problem Statement

Existing data will be compiled and reviewed to develop the problem statement, including a description of impacts from nitrogen and potential sources of nitrogen. Potential sources include non-point sources such as failing septic tanks and agriculture and point source discharges.

b. Numeric Target

c. Source Analysis

d. Allocations

e. Linkage Analysis

f. Margin of Safety

g. Technical TMDL Report

h. Stakeholder Participation

Stakeholder participation is an ongoing part of the TMDL process. Staff will solicit participation during the development of the problem statement.

- i. Implementation Plan**
- j. Monitoring/Re-evaluation**
- k. Staff Workshops**
- l. Notice of Filing/Hearing**
- m. Regional Board Hearing**

5. Budget/Products/Completion Dates

Task	Staff Resources (\$\$)	Contracts (\$)	Products	Completion Dates
a	\$6,000		Problem Statement Write-up	9/2000
b			Numeric Targets	
c			Source Analysis	
d			Allocations	
e			Linkage Analysis	
f			Margin of Safety	
g			Technical TMDL report	
h	\$5,000		Stakeholder Participation	
i			Draft Implementation Plan	
j			Draft Monitoring/Re-evaluation	
k			Staff Workshops	
l			Notice of Filing	
m			Regional Board Hearing	
	\$11,000	Total		

1. Project Title

McGrath Beach Coliform TMDL

2. Description

A problem statement will be completed for this TMDL.

Hydrologic Unit Description:

3. Purpose/Objectives

Adoption of coliform TMDL for McGrath Beach.

4. Tasks

- a. **Problem Statement**
- b. **Numeric Target**
- c. **Source Analysis**
- d. **Allocations**
- e. **Linkage Analysis**
- f. **Margin of Safety**
- g. **Technical TMDL Report**
- h. **Stakeholder Participation**
- i. **Implementation Plan**
- j. **Monitoring/Re-evaluation**
- k. **Staff Workshops**
- l. **Notice of Filing/Hearing**
- m. **Regional Board Hearing**

5. Budget/Products/Completion Dates

Task	Staff Resources (\$\$)	Contracts (\$)	Products	Completion Dates
a	\$7,000		Problem Statement Write-up	8/2000
b			Numeric Targets	
c			Source Analysis	
d			Allocations	
e			Linkage Analysis	
f			Margin of Safety	
g			Technical TMDL report	
h			Stakeholder Participation	
i			Draft Implementation Plan	
j			Draft Monitoring/Re-evaluation	
k			Staff Workshops	
l			Notice of Filing	
m			Regional Board Hearing	
	\$7,000	Total		

Region 5

Regional SFY 1999/00 Contract allocation; \$200,000

No. 1 TMDL Workplan for OP Pesticides in Urban Creeks

1. Project Title

Workplan for addressing organophosphate (OP) pesticides in Sacramento and Stockton area urban creeks

2. Description

Monitoring data from creeks in the Sacramento and Stockton urban areas has documented that OP pesticide (diazinon and chlorpyrifos) concentrations are often at levels that are toxic to aquatic organisms. Pesticides are used in urban settings for controlling pests in and around homes and businesses. Through a stakeholder forum (existing Urban Pesticide Committee) and in close coordination with the Department of Pesticide Regulation, we will seek to develop and implement a load reduction strategy. In order to develop the strategy, we need to determine the sources of pesticides entering urban creeks, to evaluate the factors that contribute to the observed concentrations, to identify alternatives that could reduce or eliminate the pesticides in urban creeks, and to work with stakeholders to develop a strategy to implement control efforts. Applicable elements of the strategy will be packaged into a report and submitted to US EPA for their consideration in establishing a TMDL.

3. Purpose/Objectives

The purpose is to develop and oversee implementation of a strategy to reduce the levels of the OP pesticides in urban creeks in the Sacramento and Stockton areas to achieve targets developed to protect beneficial uses. An interim product will be a report submitted to US EPA that includes the elements needed for them to consider in establishment of a TMDL.

4. Tasks

a. Problem Statement

Diazinon and chlorpyrifos are widely used for insect control in urban areas. Monitoring in Sacramento, Stockton and in the San Francisco Bay area has confirmed the presence of these pesticides in urban creeks at levels that are toxic to aquatic organisms. Toxic conditions are most pronounced when storm water runoff carries the pesticides to the creeks, but toxicity is observed throughout the year. Staff will review available information and prepare a comprehensive problem statement.

More information could be collected to determine the significance of the problem, including comprehensive surveys to document the potential and existing beneficial uses associated with the urban creeks. Stakeholders should be responsible for conducting these studies. In the absence of this information, conservative assumptions will be made.

b. Numeric Targets

Currently, there are no numerical water quality objectives for diazinon and chlorpyrifos that apply to surface waters in the Region. Efforts are underway to define appropriate targets for the mainstem rivers. This information should be useful in helping make determinations about urban creeks. For representative watersheds, a preliminary target or range of targets will be developed to use in calculating load reduction alternatives.

c. Source Analysis

In urban areas, OP pesticides are used for a variety of reasons including controlling pests in and around homes and businesses, controlling pests in gardens and landscape areas and controlling pests on pets. Toxic conditions are most pronounced when storm water runoff carries the pesticides to the creeks, but toxicity is observed throughout the year.

The specific urban sources (i.e., structural pest control, lawn applications, rinsing equipment, etc.), and use practices that contribute to the concentrations in urban creeks are not known. Studies need to be conducted to collect this information. Other studies need to be completed to determine whether the pesticides found in urban creeks are attributable to use in accordance with the product label directions or improper use and disposal. This is important to determine because it influences the control options that are available. Collection of this information will be done in collaboration with efforts in the Bay Area and with input from the Urban Pesticide Committee. A load source report will be prepared.

d. Allocations

A final target will be selected, and using information collected in the source analysis, alternative source reduction scenarios will be proposed and evaluated. In order to fully evaluate the efficacy of the alternatives, information needs to be collected on specific alternative practices that can be implemented to reduce loads. Also, the approach to achieve implementation needs to be identified. A load allocation report will be prepared.

e. Linkage Analysis

A linkage analysis will be conducted to ensure that the allocations will achieve compliance with water quality objectives.

f. Margin of Safety

A margin of safety will be included in the allocation calculation.

g. Report to EPA

A report that includes elements “a-f” will be prepared for submittal to EPA for their consideration in establishing a TMDL.

5. Implementation Plan

Municipalities responsible for storm water runoff cannot regulate use of pesticides; neither can the Regional Board. The Department of Pesticide Regulation is responsible for regulation of pesticide use in California. An implementation plan will be developed using the UPC as a focal point for input and discussion. The Department of Pesticide Regulation and pesticide registrants will need to be active participants in this process. The implementation plan must include specific actions that need to be implemented to accomplish the reductions needed to achieve targets and a strategy to assure that the actions are implemented. Some educational efforts are currently underway. The effectiveness of these educational efforts needs to be evaluated to determine which educational approaches should be included in any implementation plan. Environmental and economic information will need to be gathered and considered in order to develop amendments to the Basin Plan.

6. Budget/Products/Completion Dates

This effort will take 1.0 py in FY 99-2000, and the same resources will be necessary for another two fiscal years. Also, \$20,000 per year would be required for a student. For tasks lasting longer than 1 year, interim progress reports will be prepared. The table below includes state funding only.

<u>Task</u>	<u>Staff</u>	<u>Contracts</u>	<u>Products</u>	<u>Dates</u>
4a	0.3		Problem Statement	7/99 to 12/99
4b	0.2		Numeric Target	7/99 to 4/00
4c	0.3	\$200,000	Source Monitoring Plan	7/99 to 6/00
	0.3	\$200,000	Final Source Analysis	7/00 to 6/01
4d	0.2	\$100,000	Draft Allocations	7/99 to 6/00
4d	0.2	\$100,000	Final Allocation	7/00 to 6/01
4e	0.05		Linkage Analysis	7/00 to 6/01
4f	0.05		Margin of Safety	7/00 to 6/01
4g	0.4		TMDL Report	7/00 to 6/01
5	1.0		Implementation Plan	7/01 to 6/02
Students		\$ 20,000 annually		

No. 2 Implementation Plan for OP Pesticides in San Joaquin River, Sacramento River and Delta

1. Project Title

Implementation plan for the organophosphate pesticides, diazinon and chlorpyrifos, in the Sacramento River, San Joaquin River and Sacramento-San Joaquin Delta

2. Description

Monitoring data from the Sacramento River, San Joaquin River and Delta have documented that OP pesticide (diazinon and chlorpyrifos) concentrations are often at levels that are toxic to aquatic organisms. A workplan has previously been developed to use federal allocations to collect information that can be used by EPA to establish a TMDL. The EPA established TMDL would not include an implementation program. The information collected as part of the federal workplan needs to be supplemented to provide additional information to support development of an implementation plan. Additional information is needed to define sources, to determine which specific activities or actions result in off-site movement, to evaluate alternatives that will reduce off-site movement, to evaluate environmental and economic impacts associated with the alternatives and to evaluate strategies to assure that practices are implemented that achieve the targets. All elements of this project need to be closely coordinated with the Department of Pesticide Regulation and other appropriate stakeholders. It must be recognized that load reduction scenarios may vary significantly between pesticides and between different watersheds. Programs will have to be tailored to specific use patterns and watershed conditions.

3. Purpose

The purpose is to collect the information needed to support development of an implementation program to eliminate beneficial use impairments that result from off-site movement of OP pesticides to the Sacramento River, San Joaquin River and Delta.

4. Tasks

a. Problem Statement

Baseline information has already been collected and is being pulled together as part of the federal workplan. Additional monitoring is needed to fully characterize the scope and magnitude of the problem. Specifically, more data is needed from Delta back sloughs and in the Sacramento River watershed.

b. Numeric Target

Development of appropriate targets is underway and should be completed as part of the federal workplan.

c. Source Analysis

Baseline information has already been collected and is being pulled together as part of the federal workplan. General source information has been developed. For example, dormant sprays on orchards have been identified as a significant source of diazinon in the rivers and Delta. For chlorpyrifos, in-season use is a significant source. In order to develop an implementation program, more data are needed to define the factors that contribute to off-site movement from dormant sprays and in-season use (soil type, commodity, topography, etc.). A more detailed source analysis will be prepared using state resources.

d. Allocations

General allocations can be assigned based on the information collected through the federal workplan. More specific allocations accounting for technical feasibility, costs and environmental considerations need to be developed to ensure a successful implementation program. Information needs to be collected to evaluate alternatives that will reduce off-site movement, to evaluate environmental and economic impacts associated with the alternatives and to evaluate strategies to assure that practices are implemented that achieve the targets.

e. Linkage Analysis

A linkage analysis will be conducted to ensure that allocations will achieve compliance with the targets. This work will be completed under the federal workplan.

f. Margin of Safety

A margin of safety will be included in the allocation. This work will be completed under the federal workplan.

g. Reports to EPA

Reports that include elements of “a-f” will be prepared for submittal to EPA. State resources will augment existing federal allocations.

h. Implementation Plan

Elements “a-f” will be used to develop an implementation program to eliminate beneficial use impairments that result from off-site movement of OP pesticides to the Sacramento River, San Joaquin River and Delta. The implementation plan

must include specific actions that need to be implemented to accomplish the reductions needed to achieve targets and a strategy to assure that the actions are implemented. Environmental and economic information will need to be gathered and considered in order to develop amendments to the Basin Plan.

3. Budget

This effort will take 2.0 pys in FY 99-2000, and the same resources will be necessary for another two years. The following table includes state funding only.

<u>Task</u>	<u>Staff</u>	<u>Contracts</u>	<u>Products</u>	<u>Dates</u>
4a	0.5	\$100,000	Problem Statement	7/99 to 6/00
4b			Numeric Targets	7/99 to 6/02
4c	1.5	\$200,000	Draft Source Analysis SR/SJR	7/99 to 6/00
	0.6	\$200,000	Final Source Analysis SR/SJR	7/00 to 6/01
	0.6	\$100,000	Draft Source Analysis Delta	7/00 to 6/01
	1.0	\$100,000	Final Source Analysis Delta	7/01 to 6/02
4d	0.3	\$ 50,000	Allocations SR/SJR	7/00 to 6/01
	0.5	\$ 50,000	Allocations Delta	7/01 to 6/02
4e			Linkage Analyses	7/99 to 6/02
4f			Margin of Safety	7/99 to 6/02
4g	0.3		TMDL Report SR/SJR	7/00 to 6/01
	0.5		TMDL Report Delta	7/01 to 6/02
4h	0.5		Start Imp. Plan SR/SJR	7/99 to 6/00
	0.2		Start Imp. Plan Delta	7/00 to 6/01

No. 3 TMML Workplan for Selenium in San Joaquin River

1. Project Title

TMML Report for Selenium in the San Joaquin River

2. Description

The Lower San Joaquin River is listed in accordance with Section 303(d) of the Clean Water Act for impairment due to selenium. Groundwork for a TMML (total maximum monthly load) for the river was completed in 1996 and includes a Basin Plan amendment, draft reports on water quality, partitioning of sources, and a modeling effort. There are 0.2 pys of federal funding this fiscal year to review and update the available information. This was envisioned as a bare bones effort using the existing TMML information. There are not enough resources to work with the stakeholders and develop the implementation plan. Staff will use the state TMDL resources to engage the stakeholders in developing selenium load allocations that are fully protective of water quality and maximizes discharger flexibility. Staff will also conduct a thorough linkage analysis to ensure that the allocations are protective of beneficial uses. These new elements will be included in a draft TMML Report to be submitted to US EPA.

3. Purposes/Objectives

The purpose is to review and update available information and develop a selenium TMML report for the Lower San Joaquin River. This will involve significant outreach to all of the interested stakeholders, work on appropriate allocations and linkage analysis and development of an implementation plan.

4. Tasks

a. Problem Statement

The problem is well defined in previous reports. Staff will prepare a report that summarizes this information. A draft report will be prepared by June 2000 using the federal TMDL funds.

b. Numeric Target

The numeric target will be based on the Basin Plan water quality objective for selenium in the Lower San Joaquin River.

c. Source Analysis

A significant amount of work has been completed to characterize the selenium sources in the lower San Joaquin River. A report will be prepared which

summarizes this information. A draft report will be prepared by June 2000 using the federal TMDL funds.

d. Allocations

Allocations will be calculated to ensure compliance with the water quality objectives. Staff will use the state resources to develop more specific selenium load allocations with input from interested stakeholders. The goal is to develop allocations that are protective of beneficial uses and maximizes discharger flexibility for compliance. This will involve a significant amount of outreach to and coordination with interested stakeholders.

e. Linkage Analysis

A linkage analysis will be conducted to ensure that the allocations will achieve compliance with the water quality objective. A more complex allocation scheme will entail more staff resources dedicated to the linkage analysis. State resources will be used to conduct the more involved linkage analysis.

f. Margin of Safety

A margin of safety will be included in the allocation calculations

g. Technical TMML Report

A TMML Report including elements “a-f” will be submitted to EPA prior to June 2001.

5. Implementation Plan

An implementation plan will be developed using elements ‘a-f’ prior to June 2002. The implementation plan will include an evaluation of alternatives and environmental impacts, policies and control actions, and economic information.

6. Budget/Products/Completion Dates

This effort will take 1.0 py during FY 99-00 and 1.0 py each year the following two fiscal years: FY 00-01 and FY 01-02. The table below includes state funding only.

<u>Task</u>	<u>Staff</u>	<u>Contracts</u>	<u>Products</u>	<u>Dates</u>
4a			Problem Statement	7/99-6/00
4b			Numeric Target	In place
4c			Source Analysis	7/99-6/00
4d	1.0	25,000	Allocations	7/99-12/00
4e	0.5		Linkage Analysis	7/99-3/01
4f			Margin of Safety	7/99-3/01
4g	0.5		TMML Report	7/99-6/01
5	1.0		Implementation Plan	7/99-6/02

Region 7

Regional SFY 1999/00 Contract allocation; \$200,000

SUMMARY OF RESOURCE ALLOCATIONS		
Activity 1	TMDL Implementation Plan Development	1.0 PYs
Activity 2	Staff Monitoring	0.7 PYs
Activity 3	Technical TMDL Development	0.3 PYs
TOTAL ALLOCATION:		2.0 PYs

Activity 1 (1.0 PY)

TMDL Implementation Plan Development (Agricultural TMDL Implementation Framework & International Boundary TMDL Implementation Framework)

Description (Hydrologic Unit # 723)

In the Colorado River Basin Region, sources of impairment essentially fall in to three categories: (1) pollutants of agricultural nonpoint source origin, (2) pollutants originating in Mexico, and (3) bacterial pollution of uncharacterized origin.

Regional Board staff are developing this first wave of TMDL Implementation Plans using the concepts of "geographic scope" and "nesting". The *Agricultural TMDL Implementation Framework* will serve as the implementation framework for most TMDLs addressing pollutants of agricultural origin in the Imperial Valley. The *International Boundary TMDL Implementation Framework* will serve as the implementation framework for all TMDLs addressing pollutants originating in Mexico. The Implementation Frameworks will contain implementation plans for SFY 99-00 target TMDLs (that will contain activities, targets, deadlines, and schedules specific to the target TMDLs).

Purposes/Objectives

- Development of Implementation Framework for Imperial Valley Agricultural NPS TMDLs
Development of Implementation Plan for Silt TMDLs for the Alamo and New Rivers
- Development of Implementation Framework for International Boundary TMDLs
Development of Implementation Plan for the Bacteria TMDL for the New River at the International Boundary

Tasks

1. Stakeholder interaction
2. Draft Implementation Frameworks/Plans

3. Development of Interim Targets and Timelines
4. Modeling the Impact of BMP Implementation and expected water quality improvement
5. Development of Citizen Monitoring Plan

Budget/Products/Completion Dates for Activity 1

Task	Staff Resources (PYs)	Product(s)	Completion Dates
1. Stakeholder Interaction (Farm Bureau, Imperial Irrigation District, TMDL TAC, TMDL Workgroups, Bi-National TAC, etc.)	0.2	Meetings galore. Stakeholder groups will provide opinions and recommendation for development of the implementation plan.	Monthly
2. Draft Implementation Frameworks/Plans	0.5	Draft and Final Implementation Frameworks/Plans	Silt/Alamo River and Bacteria/New River: Jun-00 Silt/New River: Jun-00
3. Development of Interim Targets and Timelines	0.2	Targets and Timelines for Implementation Plans for Silt/Alamo River and Bacteria/New River TMDL	Nov-00
4. Development of Citizen Monitoring Plan	0.1	Citizen Monitoring Plan component of the TMDL Implementation Framework for Imperial Valley TMDLs	Jun-00
TOTAL	1.0		

Activity 2 (0.7 PY)

Staff Monitoring (Data Gap and Implementation Assessment)

Description

Focus of the monitoring will be on priority TMDLs (silt and bacteria), however data collection for TMDLs slated for development over the next five years will also occur.

Purposes/Objectives

To obtain and utilize current monitoring data for the purposes of TMDL development, assessment of TMDL implementation, and TMDL assessment.

Tasks

1. Develop Quality Assurance Program Plan (QAPP) for monitoring of impaired waterbodies.
2. Monitoring
3. Lab analysis (in-house)
4. Data Quality Control
5. Data compilation (utilizing the STORET system)

Budget/Products/Completion Dates for Activity 2

Task	Staff Resources (PYs)	Product(s)	Completion Dates
1. Develop QAPP	0.1	Approved Quality Assurance Program Plan	NOV-99
2. Monitor	0.3	Samples	Bi-Monthly
3. Lab-Analysis (in-house)	0.2	Sample Analysis	Bi-Monthly
4. Data QC	0.1	Quality controlled data	Monthly
5. Data compilation		incorporated into database	
TOTAL	0.7		

Activity 3 (0.3 PY)

Technical TMDL Development

Description

Augmentation of federal funds for TMDL development. Resources will be used for the more resources intensive components of the TMDL, including the source analysis, linkage analysis, loading capacity, and load/waste load allocations.

Purposes/Objectives

Refinement of TMDL development effort, including GIS training for technical staff, increased GIS mapping, application of numerical model(s) for the purposes of the technical TMDL components.

Tasks

1. GIS Training for Staff
2. GIS Mapping (for purposes of source analysis and linkage analysis)
3. Application of Numerical Model

Budget/Products/Completion Dates for Activity 3

Task	Staff Resources (PYs)	Product(s)	Completion Dates
1. Mapping	0.1	GIS map layers containing source analysis data Linkage analysis	Silt/Alamo: Nov-99 Silt/New: Jun-00
2. Application of Numerical Model	0.2	Model results	Silt/New: Jun-00
TOTAL	0.3		

REGION 8

Regional SFY 1999/00 Contract allocation; \$125,000

1. **Project Title:** Region 8 TMDL Program Coordination Activities

2. **Description: (Hydrologic Unit: 801 – entire region)**

Board staff will oversee the region's TMDL program.

3. **Purpose/Objectives**

To provide oversight and coordination of the region's TMDL activities on a region-wide and state-wide basis.

4. **Tasks**

a. **Problem Statement/Tasks**

Region 8 is currently implementing 3 Newport Bay watershed TMDLs, developing 1 Newport Bay watershed TMDL and will be initiating development of 4 TMDLs in the Big Bear Lake and Lake Elsinore/San Jacinto watersheds. All of these activities need to be coordinated to ensure time schedules are met and work products comply with existing regulations.

In addition to region-wide coordination activities, Regional Board staff will coordinate TMDL activities with the State Board and USEPA and participate in roundtables or workgroups to address TMDL issues.

Specific FY 99-00 activities will include: (note: these task descriptions are not consistent with the TMDL workplan format)

- a. Participation in the statewide TMDL workgroup
- b. Review TMDL guidance document to be developed by USEPA – Region 9
- c. Report to Regional Board, State Board and USEPA on TMDL activities
- d. Oversee TMDL development and implementation activities
- e. Prepare annual TMDL workplans and budgets

5. **Budget/Products/Completion Dates**

Products: Annual TMDL workplans, semi-annual TMDL status reports summarizing coordination activities and TMDL development and implementation activities/status

Start Date: 7/99

End Date: ongoing

Budget: 0.3 PY

1. Project Title: Big Bear Lake Nutrient TMDL Development

2. Description: (Hydrologic Unit: 801.71)

The Regional Board is scheduled to complete the Big Bear Lake nutrient TMDLs by 2005 (OAL approval). This schedule may be accelerated by 1-2 years. Activities for the upcoming year include continued monitoring, data analysis, source characterization and stakeholder meetings.

3. Purpose/Objectives

To complete the data and source characterization for the Big Bear Lake nutrient TMDL.

4. Tasks

a. Problem Statement

Big Bear Lake is currently on the 303(d) list for a number of constituents including nutrients. During the summer months, the lake is moderately eutrophic. Nutrient enrichment has resulted in the growth of rooted aquatic plants which impairs both the recreational beneficial uses of the lake and cold water aquatic habitat of the lake.

Applicable Narrative Water Quality Objective:

Waste Discharges shall not contribute to excessive algal growth inland surface receiving waters.

Applicable Numeric Water Quality Objectives:

<i>Total Inorganic Nitrogen</i>	<i>0.15 mg/L</i>
<i>Phosphorus</i>	<i>0.15 mg/L</i>

Activity: Problem statement will be developed and included in a staff report.
Schedule: Winter, 2000

b. Numeric Target

Appropriate numeric target(s) that is at least as stringent as the current nutrient water quality objectives will be set.

Activity: Numeric target(s) will be specified and included in a staff report.
Schedule: Spring, 2001

c. Source Analysis

Sample collection, data analysis and watershed modelling will be conducted to determine and quantify sources.

Activity: Results will be incorporated into a staff report.
Schedule: Spring, 2001

d. Allocations

Contingent on the results of Task c above, allocations will be developed for constituents of concern.

Activity: Results will be incorporated into a staff report.
Schedule: Spring, 2001

e. Linkage Analysis

Contingent on the results of Task c above, linkage analysis will be developed for constituents of concern.

Activity: Results will be incorporated into a staff report.
Schedule: Spring, 2001

f. Margin of Safety

Contingent on the results of Task c above, a margin of safety will be developed for constituents of concern.

Activity: Results will be incorporated into a staff report.
Schedule: Spring, 2001

g. Technical TMDL Report

The results of Tasks a, b, c, d, e, f, i and j will be compiled into a staff report.

Activity: Staff report.
Schedule: Spring, 2001

h. Stakeholder Participation

Board staff will participate in and/or facilitate stakeholder group meetings.

Activity: Stakeholder meetings.
Schedule: Ongoing

i. Implementation Plan

The results of Tasks a, b, c, d, e, f, and j will be analyzed and an implementation plan will be developed.

Activity: Results will be incorporated into a staff report.
Schedule: Summer, 2001

j. Monitoring/Re-evaluation

Board staff will coordinate monitoring activities to fill data needs with ongoing Region-wide waterbody assessment activities.

Activity: Possible sample collection and data report.
Schedule: Summer, 2001

k. Staff Workshops

Board staff will conduct Regional Board workshops to solicit public comment on the proposed TMDL.

Activity: Regional Board Workshops.
Schedule: Summer - Fall, 2001

l. Notice of Filing/Hearing

Board staff will announce and file notices of the public stakeholder meetings, workshops, hearings.

Activity: Notices.
Schedule: 2000 - 2002

m. Regional Board Hearing

Board staff will conduct a Regional Board hearing to consider approval of the proposed TMDL.

Activity: Regional Board Hearing.
Schedule: Fall – Winter 2001 – 2002

5. Budget/Products/Completion Dates

Products: TMDL staff reports, stakeholder involvement, Basin Plan Amendment
Start Date: 8/99
End Date: 2002
Budget: 1.1 PY

1. Project Title: Lake Elsinore/Canyon Lake Nutrient TMDL Development

2. Description: (Hydrologic Unit: 802.31/802.11)

The Regional Board is scheduled to complete the Lake Elsinore/Canyon Lake nutrient TMDLs by 2004 (OAL approval). Activities for the upcoming year include continued monitoring, data analysis, source characterization and stakeholder meetings.

3. Purpose/Objectives

To complete the data and source characterization for the Lake Elsinore/Canyon Lake nutrient TMDL.

4. Tasks

a. Problem Statement

Lake Elsinore/Canyon Lake is currently on the 303(d) list for a number of constituents including nutrients and low dissolved oxygen levels. During the summer months, the Lake Elsinore usually experiences large fish kills and phytoplankton blooms. Canyon Lake has a designated beneficial use of MUN (municipal drinking water supply) and has elevated nutrient levels.

Applicable Narrative Water Quality Objective:

Waste Discharges shall not contribute to excessive algal growth inland surface receiving waters.

The dissolved oxygen content of surface waters shall not be depressed below 5 mg/L for waters designated WARM as a result of controllable water quality factors.

Applicable Numeric Water Quality Objectives:

Lake Elsinore
Total Inorganic Nitrogen 1.5 mg/L

Phosphorus 0.15 mg/L

Canyon Lake
Total Inorganic Nitrogen 8.0 mg/L

Activity: Problem statement will be developed and included in a staff report.
Schedule: Winter, 2001

b. Numeric Target

Appropriate numeric target(s) that is at least as stringent as the current nutrient water quality objectives will be set.

Activity: Numeric target(s) will be specified and included in a staff report.
Schedule: Spring, 2002

c. Source Analysis

Sample collection, data analysis and watershed modeling will be conducted to determine and quantify sources.

Activity: Results will be incorporated into a staff report.
Schedule: Spring, 2002

d. Allocations

Contingent on the results of Task c above, allocations will be developed for constituents of concern.

Activity: Results will be incorporated into a staff report.
Schedule: Spring, 2002

e. Linkage Analysis

Contingent on the results of Task c above, linkage analysis will be developed for constituents of concern.

Activity: Results will be incorporated into a staff report.
Schedule: Spring, 2002

f. Margin of Safety

Contingent on the results of Task c above, a margin of safety will be developed for constituents of concern.

Activity: Results will be incorporated into a staff report.

Schedule: Spring, 2002

g. Technical TMDL Report

The results of Tasks a, b, c, d, e, f, I, and j will be compiled into a staff report.

Activity: Staff report.
Schedule: Spring, 2002

h. Stakeholder Participation

Board staff will participate in and/or facilitate stakeholder group meetings.

Activity: Stakeholder meetings.
Schedule: Ongoing

i. Implementation Plan

The results of Tasks a, b, c, d, e, f, and j will be analyzed and an implementation plan will be developed.

Activity: Results will be incorporated into a staff report.
Schedule: Summer, 2002

j. Monitoring/Re-evaluation

Board staff will coordinate monitoring activities to fill data needs with ongoing Region-wide waterbody assessment activities.

Activity: Possible sample collection and data report.
Schedule: Summer, 2002

k. Staff Workshops

Board staff will conduct Regional Board workshops to solicit public comment on the proposed TMDL.

Activity: Regional Board Workshops.
Schedule: Fall - Winter, 2002 -2003

l. Notice of Filing/Hearing

Board staff will announce and file notices of the public stakeholder meetings, workshops, and hearings.

Activity: Notices.

Schedule: 2000 - 2003

m. Regional Board Hearing

Board staff will conduct a Regional Board hearing to consider approval of the proposed TMDL.

Activity: Regional Board Hearing.
Schedule: Winter 2003

5. Budget/Products/Completion Dates

Products: TMDL staff reports, stakeholder involvement, Basin Plan Amendment

Start Date: 8/99

End Date: 2003

Budget: 1.1 PY

REGION 9

Regional SFY 1999/00 Contract allocation; \$38,000

1. PROJECT TITLE

TMDL for Chollas Creek and San Diego Bay near Chollas Creek

2. DESCRIPTION

Chollas Creek is on the 303(d) list for cadmium, copper, lead, zinc, and toxicity in storm water. San Diego Bay near Chollas Creek is on the 303(d) list for benthic community degradation and toxicity. Chollas Creek is located in hydrologic subarea 908.22, as identified in the SDRWQCB Basin Plan. The portion of San Diego Bay which is near Chollas Creek and which is on the 303(d) list is located adjacent to hydrologic subarea 908.22. San Diego Bay is a UWA Category 1 priority. This is a "commitment" technical TMDL, to be completed no later than April 2000. California NPS/CZARA management measures 3.3A, 3.5D, 3.5F, 3.6A, 6C, and 6.D are potentially relevant.

3. PURPOSES / OBJECTIVES

Develop TMDL for Chollas Creek and San Diego Bay near Chollas Creek.

4. TASKS

a. Problem Statement:

SDRWQCB staff will prepare a written problem statement which identifies the water quality standard(s) not met, describes the beneficial uses which are impaired or threatened, discusses the nature of the impairment or threat, and identifies the pollutant(s) causing the impairment or threat. Work will include compilation of existing water quality data, creation of a technical advisory group, compilation of a stakeholder list, and initial meetings and/or other communications with the technical advisory group and stakeholders.

b. Numeric Target(s):

SDRWQCB staff will prepare a written report identifying and discussing the numeric water quality target(s) to be achieved by implementation of the TMDL. The numeric target(s) will be used to measure progress towards meeting the water quality standard(s). Work will include development of draft numeric water quality target(s), and meetings and/or other communication with the technical advisory group and stakeholders.

c. Source Analysis:

SDRWQCB staff will prepare a written report characterizing the origin and magnitude of causative pollutant loadings entering Chollas Creek and San Diego Bay near Chollas Creek. The source analysis may be based on field measurements, existing data, water quality models, calculations and/or estimates. Work will include meetings and/or other communication with the technical advisory group and stakeholders to identify sources, determine contributions from various sources, and evaluate the difficulty of reducing loadings from various sources.

d. Allocations:

SDRWQCB staff will prepare a written report describing proposed causative pollutant loading allocations to point sources, nonpoint sources, and natural background sources. The report will also identify parties responsible for taking the control actions necessary to achieve reductions in causative pollutant loadings. Work will include evaluation of best management practices and meetings and/or other communication with the technical advisory group and stakeholders to determine causative pollutant loading reductions that can be achieved for various sources

e. Linkage Analysis:

In conjunction with development of the proposed allocations (Task D, above), SDRWQCB staff will prepare a written report that documents the relationship of the proposed allocations to the numeric target(s) (developed in Task B, above).

f. Margin of Safety:

In conjunction with development of the proposed allocations (Task D, above), SDRWQCB staff will prepare a written report which describes the margin of safety used in the proposed causative pollutant load allocations to point sources, nonpoint sources, and natural background sources. The margin of safety will take into account uncertainties about the relationship between pollutant loads and the quality of the receiving waters.

g. Technical TMDL Report:

SDRWQCB staff will compile the products of Tasks A - F, above, with revisions as appropriate, and submit the compilation to USEPA as the Technical TMDL Report. SDRWQCB staff will prepare written responses to comments received by USEPA.

h. Stakeholder Participation:

As discussed above and below, SDRWQCB staff will conduct meetings and/or use other means to communicate with and solicit comments from stakeholders throughout the TMDL process.

i. Implementation Plan:

SDRWQCB staff will prepare a written TMDL implementation plan describing actions to be taken, performance standards, responsible parties, and milestone dates. Work will include meetings and/or other communication with the technical advisory group and stakeholders.

j. Monitoring / Re-evaluation:

Staff will prepare a written strategy for monitoring Chollas Creek and San Diego Bay near Chollas Creek to enable measurement of progress towards meeting the numeric water quality targets and to determine if revision of the TMDL implementation plan (Task I, above) is necessary. Work will include meetings and/or other communication with the technical advisory group and stakeholders to determine monitoring strategy and responsibilities. The monitoring strategy will be incorporated into the implementation plan.

k. Staff Workshops:

SDRWQCB staff will prepare a tentative Basin Plan amendment to incorporate the TMDL into the Basin Plan. SDRWQCB staff will arrange for a scientific peer review panel to review and comment on the tentative Basin Plan amendment. SDRWQCB staff will conduct at least one public workshop to present and receive comments on the tentative Basin Plan amendment. SDRWQCB staff will revise the tentative Basin Plan amendment, as appropriate, based on comments received from the scientific peer review panel and at the workshop(s).

l. Notice of Filing / Hearing:

SDRWQCB staff will prepare and circulate a Notice of Filing to comply with California Environmental Quality Act requirements for the proposed Basin Plan amendment. SDRWQCB staff will prepare and circulate a Notice of Public Hearing to announce that the SDRWQCB will consider amendment of the Basin Plan to incorporate the TMDL. SDRWQCB staff will make the revised tentative Basin Plan amendment available to the public.

m. Regional Board Hearing:

SDRWQCB staff will prepare and provide to the SDRWQCB a hearing package consisting of the revised tentative Basin Plan amendment, an Executive Officer Summary Report, and appropriate supporting documents. The SDRWQCB will conduct a public hearing to receive comments on the tentative Basin Plan

amendment. SDRWQCB staff will prepare responses to comments received during the comment period. The SDRWQCB will consider adoption of the tentative Basin Plan amendment at a subsequent public meeting.

5. BUDGET / PRODUCTS / COMPLETION DATES

Task	New State Funded Staff Resources (PY)	Contracts (\$)	Products	Completion Dates
A	0.1	--	Written problem statement	09/99
B	0.2	--	Written numeric target(s)	10/99
C	0.6	--	Written analysis of sources and loadings	12/99
D	0.15*	--	Written description of proposed loading allocation and responsible parties	04/00**
E	***	--	Written linkage analysis report	04/00**
F	***	--	Written description of margin(s) of safety	04/00**
G	***	--	1. Technical TMDL submittal to USEPA 2. Written responses to comments	04/00 (08/00)
H	N/A	--	Communication with stakeholders	N/A
I	***	--	Written report describing TMDL implementation plan	(11/00)
J	***	--	Written monitoring strategy	(11/00)
K	(negligible)	--	Staff workshop(s)	(02/01)
L	(negligible)	--	Notice of Filing and Notice of Public Hearing	(02/01)
M	***	--	SDRWQCB hearing and adoption of Basin Plan amendment to incorporate TMDL	(06/01)
TOTAL NEW PYs (FY 99-00 only)	1.05	--	--	--

* Other resources will be used to undertake part of this task.

** Tasks D, E, and F are closely related and will be completed at the same time.

*** Other resources will be used to undertake this task.

1. PROJECT TITLE

TMDL for Rainbow Creek

2. DESCRIPTION

Rainbow Creek is on the 303(d) list for eutrophication. Rainbow Creek is located in hydrologic subarea 902.20, as identified in the SDRWQCB Basin Plan. Rainbow Creek is tributary to the Santa Margarita River, which is a UWA Category 1 priority. This is a “commitment” technical TMDL, to be completed no later than April 2000. California NPS/CZARA management measures 1C, 1F, 1G, 3.4B, 3.6A, 5.1B, 5.4A, 5.4B, and 6D are potentially relevant.

3. PURPOSES / OBJECTIVES

Develop TMDL for Rainbow Creek.

4. TASKS

a. Problem Statement:

SDRWQCB staff will prepare a written problem statement which identifies the water quality standard(s) not met, describes the beneficial uses which are impaired or threatened, discusses the nature of the impairment or threat, and identifies the pollutant(s) causing the impairment or threat. Work will include compilation of existing water quality data, creation of a technical advisory group, compilation of a stakeholder list, and initial meetings and/or other communications with the technical advisory group and stakeholders. *(This task has been completed.)*

b. Numeric Target(s):

SDRWQCB staff will prepare a written report identifying and discussing the numeric water quality target(s) to be achieved by implementation of the TMDL. The numeric target(s) will be used to measure progress towards meeting the water quality standard(s). Work will include development of draft numeric water quality target(s), and meetings and/or other communication with the technical advisory group and stakeholders.

c. Source Analysis:

SDRWQCB staff will prepare a written report characterizing the origin and magnitude of causative pollutant loadings entering Rainbow Creek. The source analysis may be based on field measurements, existing data, water quality models, calculations and/or estimates. Work will include meetings and/or other communication with the technical advisory group and stakeholders to identify

sources, determine contributions from various sources, and evaluate the difficulty of reducing loadings from various sources.

d. Allocations:

SDRWQCB staff will prepare a written report describing proposed causative pollutant loading allocations to point sources, nonpoint sources, and natural background sources. The report will also identify parties responsible for taking the control actions necessary to achieve reductions in causative pollutant loadings. Work will include evaluation of best management practices and meetings and/or other communication with the technical advisory group and stakeholders to determine causative pollutant loading reductions that can be achieved for various sources

e. Linkage Analysis:

In conjunction with development of the proposed allocations (Task D, above), SDRWQCB staff will prepare a written report that documents the relationship of the proposed allocations to the numeric target(s) (developed in Task B, above).

f. Margin of Safety:

In conjunction with development of the proposed allocations (Task D, above), SDRWQCB staff will prepare a written report which describes the margin of safety used in the proposed causative pollutant load allocations to point sources, nonpoint sources, and natural background sources. The margin of safety will take into account uncertainties about the relationship between pollutant loads and the quality of the receiving waters.

g. Technical TMDL Report:

SDRWQCB staff will compile the products of Tasks A - F, above, with revisions as appropriate, and submit the compilation to USEPA as the Technical TMDL Report. SDRWQCB staff will prepare written responses to comments received by USEPA.

f. Stakeholder Participation:

As discussed above and below, SDRWQCB staff will conduct meetings and/or use other means to communicate with and solicit comments from stakeholders throughout the TMDL process.

g. Implementation Plan:

SDRWQCB staff will prepare a written TMDL implementation plan describing actions to be taken, performance standards, responsible parties, and milestone

dates. Work will include meetings and/or other communication with the technical advisory group and stakeholders.

j. Monitoring / Re-evaluation:

Staff will prepare a written strategy for monitoring Rainbow Creek to enable measurement of progress towards meeting the numeric water quality targets and to determine if revision of the TMDL implementation plan (Task I, above) is necessary. Work will include meetings and/or other communication with the technical advisory group and stakeholders to determine monitoring strategy and responsibilities. The monitoring strategy will be incorporated into the implementation plan.

k. Staff Workshops:

SDRWQCB staff will prepare a tentative Basin Plan amendment to incorporate the TMDL into the Basin Plan. SDRWQCB staff will arrange for a scientific peer review panel to review and comment on the tentative Basin Plan amendment. SDRWQCB staff will conduct at least one public workshop to present and receive comments on the tentative Basin Plan amendment. SDRWQCB staff will revise the tentative Basin Plan amendment, as appropriate, based on comments received from the scientific peer review panel and at the workshop(s).

l. Notice of Filing / Hearing:

SDRWQCB staff will prepare and circulate a Notice of Filing to comply with California Environmental Quality Act requirements for the proposed Basin Plan amendment. SDRWQCB staff will prepare and circulate a Notice of Public Hearing to announce that the SDRWQCB will consider amendment of the Basin Plan to incorporate the TMDL. SDRWQCB staff will make the revised tentative Basin Plan amendment available to the public.

m. Regional Board Hearing:

SDRWQCB staff will prepare and provide to the SDRWQCB a hearing package consisting of the revised tentative Basin Plan amendment, an Executive Officer Summary Report, and appropriate supporting documents. The SDRWQCB will conduct a public hearing to receive comments on the tentative Basin Plan amendment. SDRWQCB staff will prepare responses to comments received during the comment period. The SDRWQCB will consider adoption of the tentative Basin Plan amendment at a subsequent public meeting.

5. BUDGET / PRODUCTS / COMPLETION DATES

	New State Funded			Planned
--	---------------------	--	--	---------

Task	Staff Resources (PY)	Contracts (\$)	Products	Completion Dates
A	N/A	--	Written problem statement	<i>(completed)</i>
B	0.1	--	Written numeric target(s)	9/99
C	0.1	--	Written analysis of sources and loadings	9/99
D	0.35	--	Written description of proposed loading allocation and responsible parties	11/99*
E	0.1	--	Written linkage analysis report	11/99*
F	0.1	--	Written description of margin(s) of safety	11/99*
G	0.3	--	1. Technical TMDL submittal to USEPA 2. Written responses to comments	12/99 03/00
H	N/A	--	Communication with stakeholders	N/A
I	0.2	--	Written report describing TMDL implementation plan	05/00
J	0.1	--	Written monitoring strategy	(07/00)
K	(negligible)	--	Staff workshop(s)	N/A
L	(negligible)	--	Notice of Filing and Notice of Public Hearing	(08/00)
M	0.1 (in FY 99-00)	--	SDRWQCB hearing and adoption of Basin Plan amendment to incorporate TMDL	(10/00)
TOTAL NEW PYs (FY 99-00 only)	1.45	--	--	--

* Tasks D, E, and F are closely related and will be completed at the same time.

Division of Water Quality

SFY 1999/00 Contract allocation; \$80,000

Overview:

DWQ is instituting a TMDL Team comprised of staff from several units. Existing staff as well as new full time positions will be included in the Team. The focus of work described in this work plan is largely for these new positions and is generally dedicated to tracking and reporting on TMDL work being conducted in the Regions, commenting on and developing regulatory rules pertaining to TMDL development, and facilitating citizen volunteer water quality monitoring (citizen monitoring). Team activities will also include:

supporting budget requests and legislation,
conducting outreach to parties involved in TMDL work or subject to TMDL requirements,
reporting to the public,
supporting education and citizen monitoring efforts,
assisting regional board staff with specific TMDL development as requested,
responding to AB 982 requirements, and
generally integrating TMDL activities with various program requirements.

D-1.

1. Project title:

TMDL rulemaking.

2. Description

The U.S. EPA is currently involved in a rulemaking process for TMDLs and related permitting functions. U.S. EPA has stated that State's input through comments on their proposal is vital. California will be providing comments and DWQ will be the lead on preparing these comments. In response to the new federal rule it is likely that state rule making will be required. Staff will be evaluating the 303(d) listing process for the purpose of preparing a potential rule making package.

3. Purpose/Objectives

To hire a staff person to assist with commenting on federal rules, reviewing 303(d) listing criteria, and reviewing requirements for state rules pertaining to TMDLs. Working as part of a team, one position will be rule making activities associated with TMDLs. Initially, effort will focus on the federal rule making package. Additional work will focus on 303(d) listing process and development of state rules. Assist with establishing consultation groups pursuant to AB982, and possible participation in advisory groups.

Objectives

a. To hire staff.

- b. **To evaluate and comment on the implication of various proposed rules.**
- c. **To assist with the management of one or more advisory groups..**

3. Tasks

- a. **Hire staff person**
- b. **Develop meeting structure/protocol for Duchaney workgroups.**
- c. **Evaluate 303(d) listing process needs.**
- d. **Assist in developing agendas and conducting meetings of the TMDL roundtable.**

PRODUCTS

Task	Staff Resources	Products	Completion Dates
A	\$10,000	Hire staff	Nov. 1999
B	\$10,000	Draft and Final Fed rule comments	Oct. 1999
C	\$10,000	AB 982 workgroup protocols	Feb. 2000
D	\$40,000	Draft straw proposal for 303(d) listing process	June 2000
E	\$30,000	Conduct two TMDLroundtables and prepare a third meeting	Jan., Apr., June 2000

D-2.

1. Project title:

TMDL tracking, reporting, and technical assistance

2. Description

Reporting and tracking of regional board progress in developing and implementing TMDL has become a pressing need. The need arises from the continuous litigation pressures focused on TMLDs, on budgetary control language directing certain types of reports, and from management concerns about the adequacy and efficacy of the growing amount of TMDL work. This project is designed to address these concerns by creating dedicated tasks to track and report on TMDLs to management. In addition it is necessary to track developments in the technical approach to TMDLs. This position will be responsible for evaluating technical approaches used around the state and in other states

that are associated with specific TMDL questions confronting Regional Board staff. The products from this work will provide assistance to Regional Boards in technical issues related to TMDL development

3. Purpose/Objectives

To hire a staff person and begin work on instituting a tracking and reporting process for TMDL work. Working as part of a team, one position will be dedicated to tracking and reporting on progress in developing and implementing TMDLs. Expenditures will be tracked and reported in relation to overall resources available and percent of budgeted resources for the specific TMDL. Task codes will be established for individual TMDLs. TMDL products will be tracked using the elements defined as part of the federal fund grant workplans. Reports will be provided to management, MCC, and the Legislature as needed. Primary objects for this position in the current year is to establish the tracking system. As time allows, technical issues in TMDL development will be identified and Regional Board staff surveyed for technical assistance needs. Priority issues will be identified and work will begin to familiarize staff with current state-of-the-art approaches.

Objectives

- a. To hire staff.**
- b. To establish routine method of capturing information about TMDL progress.**
- c. To provide timely information to management on expenditures and budgeted resources.**

4. Tasks

- a. Hire staff person.**
- b. Develop task code structure for TMDL tracking**
- c. Develop reporting format for TMDL expenditures**
- d. Develop reporting format for TMDL milestone tracking**
- e. Institute milestone tracking**
- f. Produce quarterly reports for milestones and expenditures.**
- g. Supervise staff.**

5. PRODUCTS

Task	Staff Resources	Products	Completion Dates
A	\$10,000	Hire staff	Nov. 1999
B	\$10,000	Develop task code structure	Oct. 1999
C	\$10,000	Quarterly reports on expenditures and TMDL progress for fall and winter quarters	Jan, Apr. 2000
D	\$20,000	Draft milestone reporting format	Feb. 2000
E	\$30,000	Office of Information Technology information package	Dec. 1999
F	\$20,000	MCC updates	monthly

D-3

1. Project title:

Citizen Volunteer Water Quality Monitoring Coordinators.

2. Description

DWQ has identified a strategic need of citizen volunteer water quality monitoring as part of the overall process for ensuring water quality, and specifically as part of the ongoing implementation strategy for TMDLs. It is envisioned that as citizen groups become more proficient in monitoring that their work could be used in assessment of state waters and/or in TMDL development. For the last several years DWQ has sponsored a statewide Coordinator for Citizen Volunteer Water Quality monitoring. The current budget provides resources for 3 additional coordinators. This work plan element describes the initial efforts for these coordinators. It is envisioned that these coordinators will work closely with Regional Board Watershed Coordinators to further develop communication lines with the public and to bring a level of understanding about public concerns to staff. Coordinators will be housed in regional board host offices and responsible for servicing groups in three regions each. In addition, some specialization will be assigned depending on skill levels of successful applicants. The areas of specialization will focus on training groups, managing group monitoring data, and developing new volunteer monitoring tools.

3. Purpose/Objectives

To hire three staff, place them in the host regional offices (Regions 2, 4, 6) and familiarize them with the goals, objectives, and personnel that are involved in citizen monitoring activities throughout the state.

Objectives:

- a. To hire and place three new staff in regional host offices

- b. To familiarize new staff with goals and techniques used in volunteer monitoring
- c. To introduce new staff to regional staff and citizen groups and to establish working relationships among staff and the groups.

4. Tasks:

- 1. Hire 3 citizen monitoring coordinators.
- 2. Arrange for Regional Host: work with host staff to address office, telecommunications and administrative support requirements.
- 3. Attend Team Coordination Meetings: meet with 2 regional coordinators and the state coordinator for citizen monitoring.
- 5. Attend TMDL Roundtables
- 6. Review Statewide Citizen Monitoring Program to understand Goals and Objectives for: Technical Assistance, Data Management, Training, and Outreach

7. CONDUCT NEEDS ASSESSMENT

- a. Review TMDL priorities with WMI Coordinators in three Regions.
- b. Consult with TMDL staff at three Regions to examine how community-based monitoring programs can be integrated with the monitoring and assessment activities of the TMDL programs.
- c. Identify monitoring parameters and protocols that will aid the Regional Boards' efforts to develop TMDLs.
- d. Survey citizen monitoring groups to determine their interest in organizing monitoring activities around TMDL priorities.
- f. Survey groups to determine what they need (training, equipment, funding, data management support, technical assistance) to undertake monitoring in TMDL watersheds

8. DATA MANAGEMENT

- a. Review water quality data acquisition, storage, retrieval procedures relative to TMDL activities to assess feasibility of integrating citizen monitoring data.
- b. Collect and review existing water quality assurance program plans (QAPP) for citizen monitoring programs.

5. Products:

Task	Staff Resources	Products	Completion Dates
A	\$10,000	Hire staff	Dec. 1999
B	\$5,000	Host Regional Board office space and equipment secured	Dec. 1999
C	\$30,000	Summary of volunteer water quality monitoring protocol needs	Jun. 2000
D	\$30,000	Citizen monitoring group surveys	Jun. 2000
E	\$25,000	Summary of data management issues	Jun. 2000

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File No:

**FY 1999-00 COMBINED SECTION 106
AND SECTION 104(B)(3) WORKPLAN
(July 1, 1999 – June 30, 2000)
INCLUDING CONTINUATION OF TMDL ACTIVITIES
FROM FY 1998-99
(Second Amendment December 8, 1999)**

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 Latest revision: December 8, 1999

COMBINED WORKPLAN FOR FY 1999-00
(Second Amendment December 8, 1999)
Section 104(b)(3) and Section 106 Clean Water Act
Water Pollution Control Program Grants

Amended Combined Workplan
for
Fiscal Year (FY) 1999-00
(July 1, 1999 - June 30, 2000)

California State Water Resources Control Board
and
California Regional Water Quality Control Boards

SPECIAL NOTE TO THIS WORKPLAN: This is a combined workplan which includes coordinated Watershed Management Initiative (WMI) related activities under two FY 1999-00 federal grants. They are: the Section 106 Water Pollution Control Program Grant which has traditionally covered delegated NPDES wastewater Program regulatory activities and currently covers certain NPDES stormwater and TMDL activities as well; and the Section 104(b)(3) Grant which provides support for high priority TMDL activities and for special projects. This workplan includes a description of work to complete grant activities started but not completed in FY 1998-99.

Implicit in EPA approval of this workplan is a commitment to continue to fund completion of prior year workplan activities not completed during FY 1998-99 using carryover funds to the extent available. The State Board will approve contracts for workplan activities that continue into the next fiscal year on the basis of this commitment by EPA. This commitment does not extend to NPDES Program activities, including stormwater activities. EPA is granting Section 106 funds for additional NPDES stormwater inspection activities in FY 1999-00.

SECTION ONE: SECTION 106 (NPDES PROGRAM)

Administration of the NPDES Program has traditionally been the essence of the annual Section 106 Grant workplan. For FY 1999-00, EPA has granted the SWRCB \$500,000 in Section 106 funds to support additional stormwater inspections and non-filer searches. Stormwater commitments are included with NPDES wastewater commitments in the tables at the end of this workplan. Unit cost factors have been used as a guide in developing reasonable NPDES wastewater program and NPDES stormwater program workplan commitments based on available resources. For stormwater, only the portion of the total program commitments funded by the EPA grant are shown in the tables. The NPDES wastewater grant was increased by \$848,389 in FY 1999-00.

Commitments for the entire wastewater program are, however, shown in the tables as has been done traditionally.

A. ADMINISTRATION AND MILESTONES

1. The SWRCB will provide coordinated management of the combined Section 106 and Section 104(b)(3) grants through a single grant manager in FY 1999-00. The SWRCB will maintain its oversight of the RWQCBs in all relevant CWA planning, NPDES permitting, pretreatment, compliance and enforcement, and quality assurance areas.
2. The SWRCB's Executive Director and the RWQCB Executive Officers will meet at midyear (December 1999) and at the end of the year with the Director of EPA's Water Division to review progress toward workplan completion and approaches required to meet unfulfilled commitments. The meetings will be scheduled in concert with the State's normal Management Coordinating Committee meetings.
3. The SWRCB will participate with EPA in an end-of-year review of the FY 1998-99 NPDES Program. The EPA will provide written draft reports on which the SWRCB will have a 30-day opportunity to comment.
4. The major NPDES Program milestones to be met in FY 1999-00 are as follows, reflecting the commitments made elsewhere in this workplan. Figure One explains the various periodic reports to be submitted to EPA by the SWRCB and the RWQCBs as part of this workplan. The State Board will also submit quarterly progress/status reports to EPA on work under Sections One, Two, Three, and Four of this combined workplan.

First Quarter (Ending September 30, 1999) Milestones

FY 1998-99 End-of-Year NPDES Permitting, Compliance Inspection, Pretreatment Inspection, and Enforcement Reports Submitted to EPA

First Quarter Progress/Status Report on Sections Two, Three, Four and Five Projects

Second Quarter Milestones

FY 1999-00 First Quarter NPDES Permitting, Compliance Inspection, Pretreatment Inspection, and Enforcement Reports Submitted to EPA

Annual QA Status Report Submitted to EPA

End-of-Year Review of FY 1998-99 Commitments and Accomplishments

End of year meeting between Director of EPA Water Division, SWRCB Executive Director and RWQCB Executive Officers.

Second Quarter Progress/Status Report on Sections Two, Three, and Four Projects

Third Quarter Milestones

FY 1999-00 Second Quarter NPDES Permitting, Compliance Inspection, Pretreatment Inspection, and Enforcement Reports Submitted to EPA

Third Quarter Progress/Status Report on Sections Two, Three, and Four Projects

Fourth Quarter Milestones

FY 1999-00 Third Quarter NPDES Permitting, Compliance Inspection, Pretreatment Inspection, and Enforcement Reports Submitted to EPA

End of year meeting between Director of EPA Water Division, SWRCB Executive Director and RWQCB Executive Officers.

Fourth Quarter Progress/Status Report on Sections Two, Three, and Four Projects

5. The EPA will conduct onsite assessments of RWQCB 2 and 8's NPDES Programs in FY 1999-00. The State Water Board will participate in such reviews as appropriate. The EPA will provide copies of reports on its reviews to both the affected RWQCB and the SWRCB.
7. To promote coordination and consistency in administration of the NPDES Program, EPA will provide a copy of all written communications with the RWQCBs to the SWRCB's NPDES Program Manager.
8. The SWRCB will develop a five year projection of NPDES Program workload and, using unit cost factors and other information as appropriate, an annualized NPDES Program resource need projection by May 1, 2000. This activity is being undertaken in response to a directive from the California Legislature.
9. The SWRCB will report to EPA by September 15, 2000 on the following Core Performance Measures. The measures will be taken as of June 2000.
 - a. Number of current NPDES permittees, including both individual and general permittees
 - b. Number of expired NPDES permits
 - c. Number of permits for which an application has been received but a permit has not been issued
 - d. Number of permits which are under administrative or judicial appeal
 - e. Number of general NPDES permits which have been issued and the number of enrollees, not including the statewide general stormwater permits.
 - f. Number of NPDES permits and permittees for Combined Sewer Overflows, Municipal Separate Storm Sewer Systems, the statewide general industrial stormwater permit, and the statewide general construction stormwater permit.
 - g. Number of such permits which are expired.
 - h. Number of such permits for which an application has been received but a permit has not been issued
 - i. Number of such permits which are under administrative or judicial appeal
 - j. Number of pretreatment audits and compliance inspections performed.
 - k. Number of pretreatment audits and compliance inspections performed in accordance with a watershed permitting plan (Watershed management Initiative).

- l. Percent of assessed waterbodies that protect public health and the environment by supporting (a) fish and shellfish consumption, (b) safe recreation, and (c) healthy aquatic life use designations (Through Section 305(b) reporting process)
- m. Progress in developing a statewide monitoring strategy (Through Section 305(b) reporting process)
- n. Status of developing a Unified Watershed Assessment for California.
- o. Priority waters/watersheds that are impaired or in need of special protection as identified through a 303(d) listing or the Unified Watershed Assessment or through the basin planning process. Action strategies developed that include actions needed to attain water quality standards. Measurable environmental improvements that have occurred in the last two years.
- p. Status of compliance with Section 303(d) list submittal requirements and completion of TMDLs (Through Section 303(d) reporting process)
- q. Percent of assessed rivers and lakes containing fish that should not be eaten or eaten in limited quantities (Through Section 305(b) reporting process)
- r. Data on exposure to microbial and other forms of contamination in waters used for recreation will be made available to EPA via the State's new SWIM database management system. EPA is pursuing a separate effort to develop a database on bacteriological contamination of nearshore waters in Southern California which will be added to SWIM by EcoAnalysis, the SWIM contractor.
- s. Actions taken to reduce NPDES compliance (DMR) monitoring consistent with the OW/OECA guidance of April 1996 and estimate of reductions achieved.
- t. Comparison of quarterly Clean Water State Revolving Fund (SRF) outlays with OMB planning targets.
- u. Information required for the SRF information system including nonpoint source and estuary projects funded by SRF, SRF projects that initiate operations, and "pace of the program" measures for loan issuance, pace of construction, and use of repayments.
- v. Key program elements as outlined in the national *Nonpoint Source Program and Grants Guidance for FY 1997 and Future Years* (EPA/ASIWPCA) which have been incorporated into the State's Section 319 Program.

B. NPDES PERMITTING

- a. As part of the WMI report chapters, the SWRCB and RWQCBs will develop a multi-year schedule for NPDES Program permit reissuance coordinated with the WMI. As allowed by EPA, the schedule may provide for reissuance of expired NPDES permits on schedules other than every five years in order to sequence permit reissuance activities into the WMI Integrated Planning Process. The overall goal for FY 1999-00 is to continue to implement the NPDES Program as an integral element of the WMI. The SWRCB and U.S. EPA have agreed upon a list of minimum standards for operation of the NPDES Program under WMI (NPDES instruction set) and these will be used as the basis for the NPDES Program commitments in this and future workplans.

- b. The SWRCB and the RWQCBs will jointly administer the NPDES permitting activities of the State's Water Quality Program.
- d. The SWRCB will continue to submit quarterly reports on NPDES permit reissuance to EPA. The reports will be submitted by the fifteenth day of the second month of the following quarter.
- e. The SWRCB and RWQCBs will continue implementation of a storm water discharge regulatory program, focussing efforts under this grant on additional stormwater inspections and on non-filer searches (see Table Three)

C. SLUDGE HANDLING AND POLLUTION PREVENTION

- a. For all new or reissued NPDES permits issued to dischargers treating domestic sewage or operating sewage sludge treatment/disposal facilities, the RWQCBs will include language that cross-references waste discharge orders for facilities generating sewage sludge with any waste discharge orders for facilities treating or disposing of its sewage sludge.
- b. To the extent allowed under the Basin Plans, the RWQCBs will continue to include language in municipal NPDES permits that are reopened or reissued to encourage pollution prevention and source reduction activities. The San Francisco Bay RWQCB will continue its pollution prevention efforts in support of implementation of the Comprehensive Conservation and Management Plan for the San Francisco Estuary Project.
- c. The SWRCB will continue to negotiate with EPA concerning placement of EPA-desired sludge (40CFR 503) language in the body of NPDES permits with the understanding that both policy and legal issues may be involved. The results of those negotiations will be included as an amendment to this workplan.

D. PRETREATMENT ACTIVITIES

- a. The RWQCBs will conduct pretreatment field investigations according to the commitments in Table Two. The basis for those commitments is a pretreatment program audit (PCA) within the twelve month period preceding planned reissuance of the NPDES permit so that changes needed in the pretreatment program can be included as scheduled conditions in the reissued permit and pretreatment program compliance inspections (PCI) of all permittees with pretreatment programs every other year except not in years when an audit is scheduled. This is a change from the current WMI guidance so Table Two may not agree with the WMI chapter appendixes for the May 1999 update.

- b. The RWQCBs will submit separate copies of Pretreatment Compliance Inspection reports and Pretreatment Program Audit reports to the SWRCB and EPA on the following basis.
 - 1. Report on pretreatment program audits within 90 days of the site visit. The SWRCB and EPA must provide comments to the RWQCBs within 15 working days after the draft reports are mailed. Failure to do so will be considered as concurrence with the report.
 - 2. Complete reports on pretreatment compliance inspections within 60 days of the site visit. The SWRCB and EPA must provide comments to the RWQCBs within 15 working days after the draft reports are mailed. Failure to do so will be considered as concurrence with the report.
- c. The RWQCBs will follow up on inspection and audit reports within 60 days of issuance of the report to ensure that POTWs will implement corrective actions.
- d. The RWQCBs will complete review of annual pretreatment reports within 60 days of receipt of such reports.
- e. The SWRCB will report pretreatment activities to EPA by the fifteenth day of the second month of the following quarter. The reports will include updated schedules for the remaining months of the state fiscal year.
- f. Annual pretreatment report reviews and inspection and audit reports will include completed Water Enforcement National Data Base (WENDB) data element forms.

E. COMPLIANCE AND ENFORCEMENT

- a. The SWRCB and the RWQCBs will implement the NPDES Storm Water Dischargers Compliance and Enforcement Strategy which will promote statewide consistency in inspections and enforcement, as well as in identification of storm water dischargers not in compliance with the requirement to obtain a NPDES permit. The SWRCB will pursue revision of its Administrative Procedures Manual chapters on Compliance Inspections for both NPDES wastewater and NPDES stormwater categories to address the issues of: purpose of inspections, frequency of inspections, required and recommended actions to be taken during an inspection, reporting of inspections both internally and to EPA, sampling during inspections, and timing of inspections relative to the permitting cycle.
- b. The RWQCBs will pursue compliance and enforcement activities, including permitting of dischargers not in compliance with the law.

- c. The RWQCBs will conduct compliance and enforcement activities for NPDES facilities and will take timely and appropriate enforcement action where dischargers are in violation; inspections will be conducted in conformance with the 1989 NPDES MOA and with Table Three, which generally agrees with the minimum acceptable levels defined by the State Water Board as part of the guidance for WMI chapter update. All major dischargers will be inspected at least once per year. Minor dischargers will be inspected as resources allow, but not less than once during a permit cycle, as coordinated with WMI. Table Three also includes stormwater inspections to be performed using grant funds (see Subsection G)
- d. The SWRCB will continue to submit quarterly reports to EPA of compliance inspections completed and enforcement actions taken by the fifteenth day of the second month of the following quarter.
- e. The SWRCB will submit quarterly reports to EPA on the status of judicial actions, including the following information: date case referred to State Attorney General, date case filed, date case concluded, penalty amount, and date penalty collected by the fifteenth day of the second month of the following quarter.
- f. In accordance with Figure One "Quarterly Noncompliance Report (QNCR) Schedule", the RWQCBs will report quarterly on all major NPDES dischargers in either significant or reportable noncompliance (SNC, RNC) on the QNCR (40 CFR, Section 123.45). Federally funded NPDES minors will be reported at least semiannually.

F. QUALITY ASSURANCE ACTIVITIES

- a. The SWRCB will operate a statewide quality assurance (QA) program to assure the precision, accuracy, completeness, representativeness, and comparability of water quality data gathered by SWRCB and RWQCB monitoring programs. The SWRCB will review its QA Program Plan and update as needed.
- b. The SWRCB will submit a written report on the status of implementation of its QA Program by November 15, 1999.
- c. The SWRCB will report to EPA on activities for EPA funded or mandated official measurements.
- d. The SWRCB and the RWQCBs will coordinate the annual Discharger Monitoring Report(DMR) QA analysis.

G. NPDES STORMWATER PROGRAM ACTIVITIES

This is a new subsection to Section One of the workplan. EPA has provided \$500,000 in federal grant funds to improve the field presence within the RWQCBs' administration of the NPDES Stormwater Program. The NPDES Stormwater Program was formerly entirely funded by the State and commitments with regard to this program did not appear in the Section 106 workplan. The SWRCB is generally committing to administer NPDES stormwater activities in conformance with applicable federal requirements and guidance, to the extent that available funding will allow. Both EPA and the SWRCB acknowledge that overall funding for stormwater activities within the NPDES Program is inadequate to allow the RWQCBs to pursue all necessary regulatory activities; activities must be prioritized on the basis of most critical need, except that the new federal funding allocated to the RWQCBs is to be used only for increased inspections under the statewide industrial and construction general permits. . A specific commitment is to perform 624 inspections of enrollees under the general industrial and general construction stormwater permits, as shown in Table Three, with the \$500,000 Section 106 grant allocation to supplement stormwater activities. A total of 2124 stormwater inspections are to be performed in FY 1999-00. State funds have been used in the past for: issuance/reissuance/administration of MS4 permits and the statewide general permits for industrial and construction activities, non-filer searches intended to identify and enroll additional dischargers under the statewide general permits, inspections of enrollees under the statewide general permits, general outreach/education activities focussed on urban areas, municipal stormwater program audit and field inspection programs, and violation followup and enforcement.

In lieu of Regional Board 2 staff conducting inspections with the additional Section 106 funds, staff has committed to:

Review municipal program plans and identify critical activities for audit and field inspection.

Establish field inspection form and/or standard Notice to Comply form.

Implement municipal stormwater program audit and field inspection programs with lists of municipal program audits including compilation of municipal inspection reports on industrial facilities and construction projects, estimated at up to 1,500 during FY 1999-00

The above tasks by Regional Board 2 will provide the other Regional Boards with a valuable template for coordinating activities with permitted municipalities and will provide a template for conducting municipal audits and inspections.

SECTION TWO: NEW SECTION 106 TMDL ACTIVITIES

This Section contains workplan proposals for new TMDL activities in FY 1999-00 which are to be funded by FY 1999-00 Section 106 grant funds. These are TMDLs which are part of the “June 2001 commitment”. Regional Boards will charge activities under this section to Task 252, which is a new task set up especially to track TMDL expenditures by individual TMDL for purposes of developing eventual “cost factors”. The “first” TMDL under this Section will be given PCA Code 252-01, 02, and 03; the “second” TMDL will be given PCA Code 252-04, 05, 06; the third TMDL will be given PCA Code 252-07, 08, 09, etc., and charges made accordingly. Codes 01, 04, 07, etc. are for Technical TMDL Development; codes 02, 05, 08 are for TMDL Implementation Planning; codes 253-03, 06, 09 are for TMDL Implementation/Monitoring.

SAN FRANCISCO BAY REGIONAL BOARD (2)

PROJECT: TMDL Report for Copper in San Francisco Bay

1. **Project Title** – Copper TMDL for South San Francisco Bay

2. **Hydrologic Unit Description**

South San Francisco Bay, Hydrologic Unit No. 203.1, is a Unified Watershed Assessment (UWA) Priority I Watershed. It is listed as impaired due to copper. Development of a TMDL began in FY 1998-99 and a technical TMDL is scheduled for completion in June 2002. Activities scheduled for FY1999-00 include completing the impairment assessment, completing a Conceptual Model, and identifying and filling critical information gaps.

3. **Purposes/Objectives**

The objective of the proposed activities is to develop a TMDL that will resolve impairment of South San Francisco Bay due to copper.

4. **Tasks**

a. **Problem Statement**

Complete impairment assessment review, including consideration of water effects ratio and appropriate indicator species.

b. **Numeric Target**

Complete review of conceptual model that describes the relevant process that affect copper loading, fate, and transport in South San Francisco Bay.

Identify and fill critical information gaps.

Develop appropriate quantitative model for TMDL development.

Develop TMDL for copper in South San Francisco Bay, including linkage analysis.

c. Source Analysis

Refine analysis of sources and associated loadings of copper to South San Francisco Bay.

d. Allocations

Evaluate allocation alternatives

Establish TMDL allocations, including margin of safety.

e. Linkage Analysis

See Numeric Target

f. Margin of Safety

See Allocations

g. Technical TMDL Report

Produce Technical TMDL Report that includes assemblage of results of Tasks a-f.

h. Stakeholder Participation

Establish and maintain stakeholder forum to provide advice and support for TMDL development and Implementation Plan.

i. Implementation Plan

Identify and evaluate TMDL implementation alternatives.

Establish implementation plan and schedule

j. Monitoring/Re-evaluation

Establish monitoring plan to evaluate effectiveness of TMDL and Implementation Plan.

k. Staff Workshops

See Regional Board Hearings.

l. Notice of Filing/Hearing

See Regional Board Hearings.

m. Regional Board Hearing

Conduct Regional Board process for consideration of Basin Plan amendments to adopt TMDL and Implementation Plan.

5. Budget/Products/Completion Dates

Tasks, Products, and Completion Dates are included in the following table. Budget for tasks to be funded in FY 1999-00 is also included.

Task	Staff Resources	Contracts	Products	Completion Dates
a	\$30,000		Impairment Assessment Report	January 2000
b.i	\$10,000		Conceptual Model Report	January 2000
b.ii	\$10,000		Information Gap Progress Report	June 2000
			Information Gap Final Report	June 2001
b.iii			Quantitative Model Report	January 2002
b.iv			TMDL	June 2002
c			Sources and Loadings Report	June 2001
d.i			Allocation Alternatives Report	January 2002
d.ii			Allocations Report	June 2002
g			Technical TMDL Report	June 2002
h			Stakeholder Meeting Minutes	ongoing
i.i			Implementation Alternatives Report	January 2003
i.ii			Implementation Plan	June 2003
j			Monitoring Plan	June 2003
m			Basin Plan Amendment	June 2004

Project: TMDL Report for Nickel in South San Francisco Bay

1. Project Title: Nickel TMDL for South San Francisco Bay

2. Hydrologic Unit Description:

South San Francisco Bay, Hydrologic Unit No. 203.1, is a UWA Priority Category I Watersheds, is listed as impaired due to nickel. Development of a TMDL began in FY 1998-99 and a technical TMDL is scheduled for completion in June 2002. Activities scheduled for FY1999-00 include completing impairment assessment, completing a Conceptual Model, and identifying and filling critical information gaps.

3. Purposes/Objectives

The objective of the proposed activities is to develop a TMDL that will resolve impairment of South San Francisco Bay due to nickel.

4. Tasks

a. Problem Statement

Complete impairment assessment review, including consideration of acute to chronic ratio and appropriate indicator species.

b. Numeric Target

Complete review of conceptual model that describes the relevant processes that affect nickel loading, fate, and transport in South San Francisco Bay.

Identify and fill critical information gaps.

Develop appropriate quantitative model for TMDL development.

Develop TMDL for nickel in South San Francisco Bay, including linkage analysis.

c. Source Analysis

Refine analysis of sources and associated loadings of nickel to South San Francisco Bay.

d. Allocations

Evaluate allocation alternatives

Establish TMDL allocations, including margin of safety.

e. Linkage Analysis

See Numeric Target

f. Margin of Safety

See Allocations

g. Technical TMDL Report

Produce Technical TMDL Report that includes assemblage of results of Tasks a-f.

h. Stakeholder Participation

Establish and maintain stakeholder forum to provide advice and support for TMDL development and Implementation Plan.

i. Implementation Plan

Identify and evaluate TMDL implementation alternatives.

Establish implementation plan and schedule

j. Monitoring/Re-evaluation

Establish monitoring plan to evaluate effectiveness of TMDL and Implementation Plan.

k. Staff Workshops

See Regional Board Hearings.

l. Notice of Filing/Hearing

See Regional Board Hearings.

m. Regional Board Hearing

Conduct Regional Board process for consideration of Basin Plan amendments to adopt TMDL and Implementation Plan.

5. Budget/Products/Completion Dates

Tasks, Products, and Completion Dates are included in the following table. Budget for tasks to be funded in FY 1999-00 is also included.

Task	Staff Resources	Contracts	Products	Completion Dates
A	\$30,000		Impairment Assessment Report	January 2000

b.i	\$10,000		Conceptual Model Report	January 2000
b.ii	\$10,000		Information Gap Progress Report	June 2000
			Information Gap Final Report	June 2001
b.iii			Quantitative Model Report	January 2002
b.iv			TMDL	June 2002
c			Sources and Loadings Report	June 2001
d.i			Allocation Alternatives Report	January 2002
d.ii			Allocations Report	June 2002
g			Technical TMDL Report	June 2002
h			Stakeholder Meeting Minutes	ongoing
i.i			Implementation Alternatives Report	January 2003
i.ii			Implementation Plan	June 2003
j			Monitoring Plan	June 2003
m			Basin Plan Amendment	June 2004

Project: Diazinon TMDL Reports for Urban Creeks in the San Francisco Bay Region

1. **Project Title:** Diazinon TMDLs for Urban Creeks in the San Francisco Bay Region
2. **Hydrologic Unit Description**

Hydrologic Unit Nos. 203 – 207. Urban creeks in the San Francisco Region, all of which are UWA Priority Category I Watersheds, are listed as impaired due to Diazinon, an organophosphate pesticide. Development of TMDLs will begin in FY 1999-00, and technical TMDLs are scheduled for completion in June 2002. Activities scheduled for FY 1999-00 include review of the basis for assessment and source analysis.

3. **Purpose/Objectives**

The objective of the proposed activities is to develop TMDLs that will resolve impairment of urban creeks in the San Francisco Bay Region due to diazinon.

4. **Tasks**

- a. **Problem Statement**

Establish appropriate environmental indicator for diazinon caused toxicity.

Revise assessment and listing of urban creeks

- b. **Numeric Target**

Develop conceptual model that describes the relevant process that affect diazinon loading, fate, and transport in urban creeks.

Develop TMDLs for diazinon in urban creeks, including linkage analysis.

c. Source Analysis

Identify and characterize sources and associated loadings of diazinon to urban creeks.

d. Allocations

Evaluate allocation alternatives

Establish TMDL allocations, including margin of safety.

e. Linkage Analysis

See Numeric Target

f. Margin of Safety

See Allocations

g. Technical TMDL Report

Produce Technical TMDL Report that includes assemblage of results of Tasks a-f.

h. Stakeholder Participation

Establish and maintain stakeholder forum to provide advice and support for TMDL development and Implementation Plan.

i. Implementation Plan

Identify and evaluate TMDL implementation alternatives.

Establish implementation plan and schedule

j. Monitoring/Re-evaluation

Establish monitoring plan to evaluate effectiveness of TMDLs and Implementation Plan.

k. Staff Workshops

See Regional Board Hearings.

l. Notice of Filing/Hearing

See Regional Board Hearings.

m. Regional Board Hearing

Conduct Regional Board process for consideration of Basin Plan amendments to adopt TMDL and Implementation Plan.

5. Budget/Products/Completion Dates

Tasks, Products, and Completion Dates are included in the following table. Budget for tasks to be funded in FY 1999-00 is also included.

Task	Staff Resources	Contracts	Products	Completion Dates
a	\$40,000		Impairment Assessment Report	June 2000
b.i			Conceptual Model Report	June 2001
b.ii			TMDLs	June 2002
c	\$35,000		Sources and Loadings Progress Report	June 2000
			Sources and Loadings Final Report	June 2001
d.i			Allocation Alternatives Report	January 2002
d.ii			Allocations Report	June 2002
g			Technical TMDL Report	June 2002
h			Stakeholder Meeting Minutes	ongoing
i.i			Implementation Alternatives Report	January 2003
i.ii			Implementation Plan	June 2003
j			Monitoring Plan	June 2003
m			Basin Plan Amendment	June 2004

Project: TMDL Report For PCBs in San Francisco Bay

1. Project Title: PCBs TMDL for San Francisco Bay

2. Hydrologic Unit Description

All San Francisco Bay segments, Hydrologic Unit Nos. 203 – 207, all of which are UWA Priority Category I Watersheds, are listed as impaired due to PCBs. Development of a TMDL will begin in FY 1999-00, and a technical TMDL is scheduled for completion in June 2000. Activities scheduled for FY1999-00 include review of the basis for assessment purposes and development of a conceptual model and a source analysis.

3. Purpose/Objectives

The objective of the proposed activities is to develop a TMDL that will resolve impairment of all San Francisco Bay segments due to PCBs.

4. Tasks

a. Problem Statement

Review and refine listing basis to confirm or resolve numerical thresholds used for interim health advisory for fish (use of total PCBs, versus Aroclor mixtures, versus individual congeners).

b. Numeric Target

Develop conceptual model that describes the relevant process that affect PCBs loading, fate, and transport in San Francisco Bay.

Identify and fill critical information gaps.

Develop appropriate quantitative model for TMDL development.

Develop TMDL for PCBs in San Francisco Bay, including linkage analysis.

c. Source Analysis

Identify and characterize sources and associated loadings of PCBs to San Francisco Bay.

d. Allocations

Evaluate allocation alternatives

Establish TMDL allocations, including margin of safety.

e. Linkage Analysis

See Numeric Target

f. Margin of Safety

See Allocations

g. Technical TMDL Report

Produce Technical TMDL Report that includes assemblage of results of Tasks a-f.

h. Stakeholder Participation

Establish and maintain stakeholder forum to provide advice and support for TMDL development and Implementation Plan.

i. Implementation Plan

Identify and evaluate TMDL implementation alternatives.

Establish implementation plan and schedule

- j. Monitoring/Re-evaluation**
Establish monitoring plan to evaluate effectiveness of TMDL and Implementation Plan.
- k. Staff Workshops**
See Regional Board Hearings.
- l. Notice of Filing/Hearing**
See Regional Board Hearings.
- m. Regional Board Hearing**
Conduct Regional Board process for consideration of Basin Plan amendments to adopt TMDL and Implementation Plan.

5. Budget/Products/Completion Dates

Tasks, Products, and Completion Dates are included in the following table. Budget for tasks to be funded in FY 1999-00 is also included.

Task	Staff Resources	Contracts	Products	Completion Dates
a	\$25,000		Impairment Assessment Report	June 2000
b.i	\$25,000		Conceptual Model Report	June 2000
b.ii			Information Gap Report	June 2001
b.iii			Quantitative Model Report	January 2002
b.iv			TMDL	June 2002
c	\$25,000		Sources and Loadings Progress Report	June 2000
			Sources and Loadings Final Report	June 2001
d.i			Allocation Alternatives Report	January 2002
d.ii			Allocations Report	June 2002
g			Technical TMDL Report	June 2002
h			Stakeholder Meeting Minutes	ongoing
i.i			Implementation Alternatives Report	January 2003
i.ii			Implementation Plan	June 2003
j			Monitoring Plan	June 2003
m			Basin Plan Amendment	June 2004

CENTRAL VALLEY REGIONAL BOARD (5)

**PROJECT: TMDL Report for Copper, Cadmium and Zinc
in the Upper Sacramento River**

1. Project Title

TMDL Report for copper, cadmium and zinc in the upper Sacramento River

2. **Description**

Hydrologic Units: 524.61

Copper, cadmium and zinc have been included on the Clean Water Act Section 303(d) list for the upper Sacramento River mainly because of discharges from historic mining activities in the watershed. There have been different levels of efforts to address the polluted discharges from some of these sites, from superfund actions to local mine owner sponsored clean-ups. There have been improvements in the drainage because of the mine drainage abatement activities. There is quite a bit of monitoring data available on the identified sources of metals and the condition in the upper Sacramento River. Staff will compile and review the data, determine the loads from the various sources and calculate the allocations necessary to bring the River in compliance with the water quality objectives. The TMDL Report will be transmitted to EPA by June 2001.

3. **Purposes/Objectives**

The purpose is to develop the information for all the elements of a TMDL report for copper, cadmium and zinc in the upper Sacramento River.

4. **Tasks**

a. **Problem Statement**

This will be a description of historic problems caused by metals in the upper Sacramento River. The problem is fairly well defined by earlier investigations of the mines in that watershed. A report on the problem will be developed by June 2000.

b. **Numeric Target**

There are water quality objectives for the three metals in our Basin Plan.

c. **Source Analysis**

There is ample monitoring information available from earlier investigations and as a part of the superfund activities. Staff will compile the available information for the source analysis and include that in a draft report by June 2000.

d. **Allocations**

Allocations will be calculated to ensure compliance with the water quality objectives.

e. **Linkage Analysis**

A linkage analysis will be conducted to ensure that the allocations will achieve compliance with the water quality objectives.

f. Margin of Safety

A margin of safety will be included in the allocation calculations

g. Technical TMDL Report

A TMDL report which includes elements “a-f” will be submitted to EPA prior to June 2001.

5. Budget/Products/Completion Dates

This effort will take .5 yrs during FY 99-2000 and another .3 yrs during FY 2000-2001.

Task	Staff Resources (\$\$)	Contracts (\$)	Products	Completion Dates
A	.2		Problem Statement	June 2000
B			Numeric Target	In place
C	.2		Source Analysis	June 2000
D	.1		Allocations	December 2000
E			Linkage Analysis	March 2001
F			Margin of Safety	March 2001
g			TMDL Report	June 2001

Project: TMDL Report for Mercury in Clear Lake

1. Project Title

TMDL Report for Mercury in Clear Lake

2. Description

Hydrologic Area 513.50 Upper Cache Creek

Fish in Clear Lake have elevated levels of mercury in them. Sulfur Bank Mine is the principle source of mercury to Clear Lake. Sulfur Bank Mine is a federal superfund site. Some preliminary remediation steps have been implemented and additional steps are planned. Work is underway to define which contributions from the mine are most significant to levels observed in fish. Regional Board staff plans to work with federal superfund staff to assure that information needed for the TMDL Report is developed as part of the project. The TMDL Report will be transmitted to EPA by June 2001. Clear Lake is within a Unified Watershed Assessment Priority watershed.

3. Purposes/Objectives

The purpose is to develop the information for all elements of a TMDL Report for mercury in Clear Lake. The information will be developed in coordination with activities associated with the superfund cleanup program at the mine site. Stakeholder input will be an important part of all phases of this program.

4. Tasks

a. Problem Statement

The problem is well defined in previous reports. Staff will prepare a report that summarizes this information. A draft report will be prepared by June 2000.

b. Numeric Target

Identification of the appropriate target is a critical first step. Staff will work with EPA staff and contractors to develop an appropriate target, most likely a concentration in fish tissue.

c. Source Analysis

A significant amount of work has been completed in connection with the superfund activities that characterizes the sources of mercury to the lake. Additional work is underway to define which sources from the mine are the most significant in determining mercury levels in fish. A report will be prepared which summarizes this information. A draft report will be prepared by June 2000.

d. Allocations

Previous studies have shown that the mine is the only significant source of mercury to the lake. A report will be prepared which describes the load reductions that are required to achieve the fish tissue goal.

e. Linkage Analysis

The report described under “d. allocations” will include a description of how load reductions are linked to achieving the fish tissue goal.

f. Margin of Safety

Margin of safety will be described in the allocations report.

g. Technical TMDL Report

A technical TMDL report which includes elements “a-f” will be submitted to EPA prior to June 2000.

5. Budget/Products/Completion Dates

Completion of the TMDL Report will require **\$50,000** in FY 1999-00 and \$50,000 in FY 2000-01.

Task	Staff Resources (\$\$)	Contracts (\$)	Products	Completion Dates
a	\$20,000		Report on Problem Statement	June 2000
b	\$10,000		Report on Numeric Targets	Dec 2000
c	\$20,000		Report on Sources	Dec 2000

d			Report on Allocations	Dec 2000
e			Report Describing Linkages	Dec 2000
f			Included in Task d	Dec 2000
g			Technical TMDL Report	June 2001

LAHONTAN REGIONAL BOARD (6)

Project: Use Attainability Analyses (UAA)/Blanket TMDL for Nine Waters

1. Project Title

Use Attainability Analyses (UAA)/Blanket TMDL for Nine Waters

2. Description

For nine waters currently listed as ‘naturally impaired’, the MUN beneficial use cannot be removed because the nine waters have an existing MUN use, or have had one after 1975. After completion of a UAA, one ‘blanket’ TMDL will be completed for these nine waters. This ‘blanket’ TMDL is the second of three TMDL ‘commitments’ for completion by 6/2001.

The table below lists the HU number for each of the nine waters, indicates whether or not each one is a Category 1 Unified Watershed Assessment Priority, and shows the pollutant of concern.

Name	HU Number	Watershed	Pollutant	Category UWA Priority (yes or no)
Upper Alkali Lake	641.00	Surprise Valley	salinity	No
Middle Alkali Lake	641.00	Surprise Valley	salinity	No
Lower Alkali Lake	641.00	Surprise Valley	salinity	No
Top Spring	637.20	Honey Lake	radioactivity	Yes
Grant Lake	601.000	Mono Lake	arsenic	Yes
Mono Lake	601.000	Mono Lake	salinity	Yes
Hot Creek	603.100	Owens River	metals	Yes
Searles Lake	621.000	Searles Lake	salinity	no
Big Springs	603.100	Owens River	arsenic	yes

The main tasks to complete this project are review of information compiled by RWQCB staff, conduct additional literature review as necessary, collect information needed for CEQA/Porter-Cologne analysis (e.g., socioeconomic information), organize the information in UAA format, and draft Basin Plan TMDL amendment language based on the UAA.

3. Purposes/Objectives

The purpose of this project is to complete Use Attainability Analyses (UAA) and a Blanket TMDL for nine waters by 6/2001.

4. Tasks

- a. **Problem Statement** -- review draft completed by RWQCB staff, conduct additional literature review as necessary, collect information needed for CEQA/Porter-Cologne analysis (e.g., socioeconomic information), organize the information in UAA format
 - b. **Numeric Target** -- N/A (likely impaired from natural causes)
 - c. **Source Analysis** -- conduct additional literature review as necessary (see a above)
 - d. **Allocations** -- N/A, see b above
 - e. **Linkage Analysis** -- N/A, see b above
 - f. **Margin of Safety** -- N/A, see b above
 - g. **Technical TMDL Report** - **this task would include assembly of elements “a-f” for submittal to EPA.** -- organize the information in UAA format and into TMDL report format
 - h. **Stakeholder Participation** - **this task would include activities such as participation with or facilitation of stakeholder groups. Higher priority for funding this task would be given as it relates to “a-g”.** -- N/A, see b above. Stakeholder participation will be possible during Basin Plan amendment process
 - i. **Implementation Plan** -- N/A, see b above
 - j. **Monitoring/Re-evaluation** -- N/A, see b above
 - k. **Staff Workshops**-- will be scheduled as part of Basin Plan amendment process
 - l. **Notice of Filing/Hearing**-- will be scheduled as part of Basin Plan amendment process
 - m. **Regional Board Hearing** -- will be scheduled as part of Basin Plan amendment process
5. **Budget/Products/Completion Dates -- Total Funding For this Project Under this Workplan is for Tasks a,b,and g which equals 0.25 PY or \$ 25,000**

Task	Staff Resources (\$)	Contracts (\$)	Products	Completion Dates
a	\$17,000		Completed Problem Statement	April 2000
b				
c	\$7,000		Completed Source Analysis	April 2000
d				
e				
f				

Task	Staff Resources (\$)	Contracts (\$)	Products	Completion Dates
g	\$1,000		Completed UAA/Technical TMDL Report	June 2000
h				
i				
j				
k	\$5,000 (not to be funded as part of this workplan)			not yet scheduled
l	\$5,000 (not to be funded as part of this workplan)			not yet scheduled
m	\$5,000 (not to be funded as part of this workplan)			not yet scheduled

Project: De-listing of Nine Waters Thus Reducing by Nine the Number of TMDLs That Need to Be Completed

1. Project Title

De-listing of Nine Waters Thus Reducing by Nine the Number of TMDLs That Need to Be Completed

2. Description

As part of the next set of Basin Plan amendments scheduled for completion by 6/99, the RWQCB is proposing to remove the MUN beneficial use from nine of the waters currently listed as 'naturally impaired' on the CWA Section 303 (d) list. The RWQCB could then delist these nine waters in 2000, thus reducing by nine the number of TMDLs that need to be completed. **This is the third of the three TMDL commitment activities to be completed by 6/2001.**

The table below lists the HU number for each of the nine waters, indicates whether or not each one is a Category 1 Unified Watershed Assessment Priority, and shows the pollutant of concern.

Name	HU Number	Watershed	Pollutant	Category UWA Priority (yes or no)
Wendel Hot Springs	637.200	Honey Lake	metals	yes
Amedee Hot Springs	637.200	Honey Lake	metals	yes
Fales Hot Springs	631.000	Walker River	metals	yes
Hot Creek	631.400	Walker River	metals	yes
Little Hot Creek	603.100	Owens River	metals	yes
Little Alkali Lake	603.100	Owens River	salinity	yes
Keough Hot Springs	603.000	Owens River	metals	yes
Deep Springs Lake	605.000	Deep Springs	salinity	no
Amargosa River	609.000	Amargosa River	salinity	no

3. Purposes/Objectives

The purpose of this project is to de-list nine waters thus reducing by nine the number of TMDLs that need to be completed.

4. Tasks

- a. **Problem Statement** -- will be in staff report for MUN de-designation to be completed by September 1999
- b. **Numeric Target** -- N/A as impairment is from natural causes
- c. **Source Analysis** -- impairment from natural causes as described in staff report to be completed 9/99
- d. **Allocations** -- N/S; see b above
- e. **Linkage Analysis** -- N/S; see b above
- f. **Margin of Safety** -- N/S; see b above
- g. **Technical TMDL Report** - this task would include assembly of elements “a-f” for **submittal to EPA**. -- a summary of Board action and staff report will be prepared for EPA to justify de-listing from 303(d) list in 2000.
- h. **Stakeholder Participation** - this task would include activities such as participation with or facilitation of stakeholder groups. **Higher priority for funding this task would be given as it relates to “a-g”**. -- Stakeholder participation will be possible through Basin Plan amendment process and through the CEQA process
- i. **Implementation Plan** -- removing the waters from the 303(d) list
- j. **Monitoring/Re-evaluation** -- N/A
- k. **Staff Workshops** -- staff presentation to Board and public as part of the Basin Plan amendment process to de-designate MUN
- l. **Notice of Filing/Hearing** -- will be noticed three weeks before release of staff report, likely in June 1999
- m. **Regional Board Hearing** -- part of the Basin Plan amendment process to de-designate MUN will include Board hearing; depending on when there is a quorum of the Board likely September 1999

5. Budget/Products/Completion Dates -- Total Funding For this Project Under this Workplan is for Tasks g which equals 0.1 PY or \$ 10,000

Task	Staff Resources (\$)	Contracts (\$)	Products	Completion Dates
a	is funded with FY 98/99 Basin Plan funds			9/99
b				
c	is funded with FY 98/99 Basin Plan funds			9/99
d				
e				
f				
g	\$10,000		a summary report of Board action and staff report for EPA to justify de-listing from 303(d) list in 2000	3/00
h				
i				
j				
k	is funded with FY 98/99 Basin Plan funds			9/99
l	is funded with FY 98/99 Basin Plan funds			9/99
m	is funded with FY 98/99 Basin Plan funds			9/99

SANTA ANA REGIONAL BOARD (8)

Project: Regional Board Oversight and Tracking of Newport Bay Sediment TMDL

1. Description:

The Newport Bay Watershed (Hydrological Unit 801.11), a UWA priority category 1 watershed has been the focus of Regional Board staff activities for the past three years. In October 1998, the Regional Board adopted the Newport Bay sediment TMDL, which was approved by the Office of Administrative Law in February 1999.

For Phase II Implementation of the Sediment TMDL, there are a number of TMDL requirements to be undertaken by local agencies that require Board staff oversight. These activities include sediment monitoring and implementation of sediment control measures.

2. Hydrologic Unit Description

The Newport Bay Watershed (Hydrological Unit 801.11)

3. Purposes/Objectives

As previously mentioned, the sediment TMDL has been developed and approved by the State (USEPA approval is expected within the next 30 days). Therefore, the project will focus on Phase II implementation of the approved TMDL according to the schedule specified.

- 4. Phase I TMDL Tasks**
 - a. Problem Statement**
Completed
 - a. Numeric Target**
Completed
 - c. Source Analysis**
Completed
 - d. Allocations**
Completed
 - e. Linkage Analysis**
Completed
 - f. Margin of Safety**
Completed
 - g. Technical TMDL Report**
Completed
 - h. Stakeholder Participation**
Completed
 - i. Implementation Plan**
Completed
 - j. Monitoring/Re-evaluation**
Completed
 - k. Staff Workshops**
Completed
 - l. Notice of Filing/Hearing**
Completed
 - m. Regional Board Hearing**
Completed

5. Phase II Sediment TMDL Tasks

a. Stakeholder Participation

Regional Board staff will participate in the Newport Bay Watershed Executive Committee and the Newport Bay Watershed Management Committee. These committees meet approximately quarterly and issues related implementation of the Sediment TMDL are discussed

Activity: semi-annual reports summarizing Newport Bay Watershed Executive and Management Committee Sediment TMDL activities.

b. Oversight of Sediment Monitoring Program

The sediment TMDL adopted and approved by the State contains provisions for monitoring and reevaluation of the TMDL. Regional Board staff will oversee the development and ensure implementation of a sediment monitoring program that complies with the sediment TMDL. Regional Board staff will be involved in conducting meetings with responsible agencies, reviewing the draft monitoring program for compliance with the TMDL, preparing and presenting staff recommendations to the Regional Board for approval of the monitoring program, overseeing the implementation of the monitoring program components and reviewing monitoring program results.

Activity: semi-annual report to the Regional Board on the status of the sediment TMDL including monitoring program implementation and results

6. Budget/Products/Completion Dates

Task	Staff Resources (\$\$)	Contracts (\$)	Products	Completion Dates
Phase I Sediment TMDL				
A			Completed	10/98
B			Completed	10/98
C			Completed	10/98
D			Completed	10/98
E			Completed	10/98
F			Completed	10/98
G			Completed	10/98
H			Completed	10/98
I			Completed	10/98
J			Completed	10/98
K			Completed	10/98
L			Completed	10/98
M			Completed	10/98

Task	Staff Resources (\$\$)	Contracts (\$)	Products	Completion Dates
Phase II Sediment TMDL				
A	5,000	0	Stakeholder Meetings – semi-annual report	12/99, 6/00
B	30,000	0	Sediment TMDL Implementation status report	12/99, 6/00

Project: Development of Newport Bay/San Diego Creek Watershed Regional Monitoring Program pursuant to Nutrient TMDL

1. Description:

The Newport Bay Watershed (Hydrological Unit 801.11), a UWA priority category 1 watershed has been the focus of Regional Board staff activities for the past three years. In October 1998, the Regional Board adopted the Newport Bay watershed nutrient TMDL, which was approved by the Office of Administrative Law in February, 1999.

For Phase II Implementation of the Nutrient TMDL, there are a number of TMDL requirements that require Board staff oversight. These include development and oversight of a regional nutrient monitoring program to evaluate TMDL compliance and effectiveness of implemented BMPs.

2. Hydrologic Unit Description

The Newport Bay Watershed (Hydrological Unit 801.11)

3. Purposes/Objectives

As previously mentioned, the nutrient sediment TMDL has been developed and approved by the state (USEPA approval is expected within the next 30 days). Therefore, the primary purpose of the project is to conduct Phase II nutrient TMDL activities. Specific activities will focus on ensuring that adequate monitoring data is collected pursuant to the nutrient TMDL in order to allow Regional Board evaluation of the TMDL components (compliance determination, appropriateness of wasteload and load allocations and appropriateness of specified targets).

4. Phase I TMDL Tasks

a. Problem Statement

Completed

b. Numeric Target

Completed

c. Source Analysis

Completed

d. Allocations

Completed

e. Linkage Analysis

Completed

f. Margin of Safety

Completed

g. Technical TMDL Report

Completed

h. Stakeholder Participation

Completed

i. Implementation Plan

Completed

j. Monitoring/Re-evaluation

Completed

k. Staff Workshops

Completed

l. Notice of Filing/Hearing

Completed

m. Regional Board Hearing

Completed

5. Phase II Nutrient TMDL Tasks

a. Stakeholder Participation

Regional Board staff will conduct and coordinate ongoing stakeholder meetings to develop consensus on the elements of the Regional Monitoring Program. Meetings will be conducted, at a minimum, on a quarterly basis.

Activity: Semi-annual report including meeting agendas and minutes

b. Development of Regional Monitoring Program

Regional Board staff will develop Regional Monitoring Program based on stakeholder input, watershed needs, TMDL requirements and other factors. Regional Board staff will prepare necessary documentation for Board approval of the monitoring program.

Activity: Regional Monitoring Program including cost breakdown and implementation schedule for Regional Board approval

c. Oversight of Implementation of Regional Monitoring Program

Regional Board staff will oversee implementation of Monitoring Program. This will include review of monitoring reports and TMDL compliance determination. Where needed to supplement the regional monitoring program, Board staff will also conduct watershed monitoring.

Activity: Semi-annual reports to the Regional Board on the status Nutrient Regional Monitoring Program results

6. Budget/Products/Completion Dates

Task	Staff Resources (\$\$)	Contracts (\$)	Products	Completion Dates
Phase I Nutrient TMDL				
a			completed	10/98
b			completed	10/98
c			completed	10/98
d			completed	10/98
e			completed	10/98
f			completed	10/98
g			completed	10/98
h			completed	10/98
i			completed	10/98
j			completed	10/98
k			completed	10/98
l			completed	10/98
m			completed	10/98
Phase II Nutrient TMDL				
a	5,000	0	Stakeholder Meetings – semi-annual report	12/99, 6/00
b	20,000	0	Regional Monitoring Program Proposal	12/99
c	10,000	0	Monitoring Program Implementation Status Report	6/00 and ongoing

Project: Implementation of the Newport Bay Fecal Coliform TMDL

1. Description:

The Newport Bay Watershed (Hydrological Unit 801.11), a UWA priority category 1 watershed has been the focus of Regional Board staff activities for the past three years. **The fecal coliform TMDL is one of the two Regional Board TMDL 2001 commitments.** It is anticipated that this TMDL will be approved by the Regional Board in April 1999, by the

State Board in June 1999 and by the Office of Administrative Law in September 1999. Once approved, Board staff will oversee implementation of the fecal coliform TMDL.

Board staff will work with stakeholders to develop appropriate fecal coliform control strategies that are consistent with the CZARA Management Measures and will assist in securing implementation funding. For urban runoff, Board staff will assist local agencies in implementing watershed protection activities (Management Measure 3.1.A.), addressing runoff from existing development areas (Management Measure 3.3.A.) and education and outreach programs (Management Measure 3.6.A.). To address agricultural contributions of fecal coliform, Board staff will assist agricultural operators in educational program development (Management Measure 1.G.).

3. Purposes/Objectives

The primary purpose of the project is to provide Regional Board staff support of the fecal coliform TMDL through the State Board adoption process and the Office of Administrative Law approval process. In addition, Regional Board staff will ensure local responsible agencies implement the requirements of the fecal coliform TMDL within the timeline specified by the TMDL. A number of components, including monitoring, modelling and beneficial use assessments, are required by the TMDL. Board staff expects to spend resources reviewing study and implementation proposals, assisting responsible parties in securing grant funds for implementation projects and providing status reports to the Regional Board.

4. Phase I Fecal Coliform TMDL Tasks

a. Problem Statement

Completed

b. Numeric Target

Completed

c. Source Analysis

Completed

d. Allocations

Completed

e. Linkage Analysis

Completed

f. Margin of Safety

Completed

g. Technical TMDL Report

Completed

h. Stakeholder Participation

Completed

i. Implementation Plan

Completed

j. Monitoring/Re-evaluation

Completed

k. Staff Workshops

Completed

l. Notice of Filing/Hearing

Completed

m. Regional Board Hearing

Completed

5. Phase II Fecal Coliform TMDL Tasks

a. Stakeholder Participation

Regional Board staff will conduct and coordinate ongoing stakeholder meetings to discuss all aspects of implementation of the fecal coliform TMDL. At a minimum, meetings will be conducted quarterly.

Activity: Semi-annual report including meeting agendas and minutes

b. Regional Board Staff Support of Fecal Coliform through State Board and OAL

Regional Board staff will provide support to State Board staff in the adoption of the fecal coliform TMDL by the State Board and approval by OAL. This could entail responding to comments received and/or providing technical and/or additional administrative justification to OAL.

Activity: State Approved Fecal Coliform TMDL

c. Review of Monitoring Program Results

The fecal coliform TMDL, as proposed, requires responsible parties implement a pathogen monitoring program throughout the Bay. Board staff will oversee and review the monitoring program results.

Activity: Semi-annual report summarizing pathogen monitoring program results

d. Review Proposal for Water Quality Model for Bacterial Indicators

The fecal coliform TMDL, as proposed, requires responsible parties to develop and submit for Regional Board approval a plan to develop a calibrated water quality model of fecal coliform inputs. Regional Board staff will work with responsible parties to develop an approvable modelling plan and submit necessary documentation to obtain Board approval.

Activity: Regional Board approved Newport Bay Bacterial Water Quality Model Plan

6. Budget/Products/Completion Dates

Task	Staff Resources (\$\$)	Contracts (\$)	Products	Completion Dates
Phase I Fecal Coliform TMDL				
a			Completed	10/98
b			Completed	10/98
c			Completed	10/98
d			Completed	10/98
e			Completed	10/98
f			Completed	10/98
g			Completed	10/98
h			Completed	10/98
i			Completed	10/98
j			Completed	10/98
k			Completed	10/98
l			Completed	10/98
m			Completed	10/98
Phase II Fecal Coliform TMDL				
a	5,000	0	Stakeholder Meetings – semi-annual reports	12/99, 6/00
b	10,000	0	State Approved TMDL	12/99
c	20,000	0	Monitoring Program – semi-annual reports	12/99, 6/00
d	20,000	0	Regional Board Approved Water Quality Model Plan	1/00

Project: Toxic Substances TMDL for the Newport Bay Watershed

1. Description

The Regional Board is scheduled to complete the TMDL for toxic substances for the Newport Bay watershed by January 15, 2002 (approval from Regional Board through OAL). This is also a TMDL committed for completion by USEPA at the same time due to a consent decree. The activities for FY 1999-00 include continued monitoring, data analysis, source characterization, stakeholder workshops, and the production of the initial staff report describing the TMDL.

There are several relevant CZARA management measures that could apply to the implementation of this TMDL. These include: 1A, D, F, G; 3.1A, B, C; 3.2A; 3.3A; 3.6A; 4.2E; 4.3A; 4.1A, B; 5.3A; 5.4A, B; and 6A, B, C, D.

2. **Hydrologic Unit Description**

Hydrologic Unit: 801.11

3. **Purposes/Objectives**

Develop an approvable and implementable TMDL that achieves water quality objectives.

4. **Tasks**

a. **Problem Statement**

The four waterbodies included in this TMDL (i.e., San Diego Creek, Reach 1, San Diego Creek, Reach 2, Upper Newport Bay, and Lower Newport Bay) are variously listed on the 303(d) list for metals, pesticides, priority organics, and unknown toxicity. The applicable narrative water quality objectives in the Basin Plan that apply to all four of these causes are:

“Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels which are harmful to human health

The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses”

The TMDL will address how these four causes affect these objectives.

Activity: Problem statement will be developed and included in a staff report in Winter 1999.

b. **Numeric Target**

The narrative objectives will be quantified and numeric targets will be set.

Activity: Numeric targets will be developed and included in a staff report in Winter 1999.

c. **Source Analysis**

Data analysis will focus on the following areas: Chemical data, bioaccumulation data, pesticide use data.

Activity: Results will be incorporated into a staff report in Spring 2000.

Land use data will be updated and analyzed to determine any spatial patterns in chemical, bioaccumulation, and pesticide data.

Activity: Results will be incorporated into a staff report in Spring 2000.

d. Allocations

Contingent on the results of Task c. above, allocations will be developed for chemicals of concern.

Activity: Results will be incorporated into a staff report in Spring 2000.

e. Linkage Analysis

Contingent on the results of Task c. above, linkage analysis will be developed for chemicals of concern.

Activity: Results will be incorporated into a staff report in Spring 2000.

f. Margin of Safety

Contingent on the results of Task c. above, a margin of safety will be developed for chemicals of concern.

Activity: Results will be incorporated into a staff report in Spring 2000.

g. Technical TMDL Report

The results of Tasks a, b, c, d, e, f, i, and j will be compiled into a staff report.

Activity: Staff report in Spring 2000.

h. Stakeholder Participation

Board staff will facilitate stakeholder group meetings

Activity: Stakeholder meetings

i. Implementation Plan

The results of Tasks a, b, c, d, e, f and j will be analyzed and an implementation plan will be developed.

Activity: Results will be incorporated into a staff report in Spring 2000.

j. Monitoring/Re-evaluation

Toxicity testing and source analysis started under a Section 205(j) grant will continue with a Section 319(h) grant to Orange County. The testing will focus on specific land uses within the watershed.

Activity: Interim Summary Report in July 2000.

k. Staff Workshops

Board staff will conduct Regional Board workshops to solicit public comment on the proposed TMDL

Activity: Board Workshops in Summer and Winter 2000

l. Notice of Filing/Hearing

Board staff will announce and file notices of the public stakeholder meetings, workshops, hearings.

Activity: Notices in 2000-2001

m. Regional Board Hearing

Board staff will conduct a Regional Board hearing to consider approval of the proposed TMDL.

Activity: Board Hearing in Winter 2000 and Spring 2001

5. Budget/Products/Completion Dates

Task	Staff Resources (\$\$)	Contracts (\$)	Products	Completion Dates
a	\$5,000		Problem statement	Winter 1999
b	5,000		Numeric targets	Winter 1999
c	50,000		Data analysis	Spring 2000
	10,000		Land use data update	Spring 2000
d	5,000		Allocation	Spring 2000
e	5,000		Linkage analysis	Spring 2000
f	5,000		Margin of Safety	Spring 2000
g	20,000		Staff report	Spring 2000
h	10,000		Stakeholder meetings	Continuous
i	10,000		Implementation plan	Spring 2000
j			Interim Summary Report	July 2000
k			Board Workshops	Summer- Winter 2000
l			Notices	2000-2001

m			Board Hearing	Winter- 2001	Spring
	\$125,000		Total		

SAN DIEGO REGIONAL BOARD (9)

Project: TMDL for San Diego Bay at Shelter Island Yacht Basin

1. Description

The Shelter Island Yacht Basin portion of San Diego Bay is located adjacent to hydrologic area 908.10, as identified in the SDRWQCB Basin Plan. San Diego Bay at Shelter Island Yacht Basin is on the 303(d) list for dissolved copper. San Diego Bay is a UWA Category 1 priority. This is a “commitment” technical TMDL, to be completed no later than June, 2001. CZARA management measures 5.1E, 5.2E, and 5.3A are potentially relevant.

2. Hydrologic Unit Description

Hydrologic Area 908.10

3. Purposes/Objectives

Develop TMDL for San Diego Bay at Shelter Island Yacht Basin.

4. Tasks

a. Problem Statement:

SDRWQCB staff will prepare a written problem statement which identifies the water quality standard(s) not met, describes the beneficial uses which are impaired or threatened, and discusses the nature of the impairment or threat. Work will include compilation of existing water quality data, creation of a technical advisory group, compilation of a stakeholder list, and initial meetings and/or other communications with the technical advisory group and stakeholders.

b. Numeric Target(s):

SDRWQCB staff will prepare a written report identifying and discussing the numeric water quality target(s) to be achieved by implementation of the TMDL. The numeric target(s) will be used to measure progress towards meeting the water quality standard(s). Work will include development of draft numeric water quality target(s), and meetings and/or other communication with the technical advisory group and stakeholders.

c. Source Analysis:

SDRWQCB staff will prepare a written report characterizing the origin and magnitude of copper loadings entering San Diego Bay at Shelter Island Yacht Basin. The source analysis

may be based on field measurements, existing data, water quality models, calculations and/or estimates. Work will include meetings and/or other communication with the technical advisory group and stakeholders to identify sources, determine contributions from various sources, and evaluate the difficulty of reducing loadings from various sources.

d. Allocations:

SDRWQCB staff will prepare a written report describing proposed copper loading allocations to point sources, nonpoint sources, and natural background sources. The report will also identify parties responsible for taking the control actions necessary to achieve reductions in copper loadings. Work will include evaluation of best management practices and meetings and/or other communication with the technical advisory group and stakeholders to determine copper loading reductions that can be achieved for various sources

e. Linkage Analysis:

In conjunction with development of the proposed allocations (Task d, above), SDRWQCB staff will prepare a written report which documents the relationship of the proposed allocations to the numeric target(s) (developed in Task b, above).

f. Margin of Safety:

In conjunction with development of the proposed allocations (Task d, above), SDRWQCB staff will prepare a written report which describes the margin of safety used in the proposed copper load allocations to point sources, nonpoint sources, and natural background sources. The margin of safety will take into account uncertainties about the relationship between copper loads and the quality of the receiving waters.

g. Technical TMDL Report:

SDRWQCB staff will compile the products of Tasks a - f, above, with revisions as appropriate, and submit the compilation to USEPA as the Technical TMDL Report.

h. Stakeholder Participation:

As discussed above and below, SDRWQCB staff will conduct meetings and/or use other means to communicate with and solicit comments from stakeholders throughout the TMDL process.

i. Implementation Plan:

SDRWQCB staff will prepare a written TMDL implementation plan describing actions to be taken, performance standards, responsible parties, and milestone dates. Work will include meetings and/or other communication with the technical advisory group and stakeholders.

j. Monitoring/Re-evaluation:

Staff will prepare a written strategy for monitoring San Diego Bay at Shelter Island Yacht Basin to enable measurement of progress towards meeting the numeric water quality targets and to determine if revision of the TMDL implementation plan (Task i, above) is necessary. Work will include meetings and/or other communication with the technical advisory group

and stakeholders to determine monitoring strategy and responsibilities. The monitoring strategy will be incorporated into the implementation plan.

k. Staff Workshops:

SDRWQCB staff will prepare a tentative Basin Plan amendment to incorporate the TMDL into the Basin Plan. SDRWQCB staff will arrange for a scientific peer review panel to review and comment on the tentative Basin Plan amendment. SDRWQCB staff will conduct at least one public workshop to present and receive comments on the tentative Basin Plan amendment. SDRWQCB staff will revise the tentative Basin Plan amendment, as appropriate, based on comments received from the scientific peer review panel and at the workshop(s).

l. Notice of Filing/Hearing:

SDRWQCB staff will prepare and circulate a Notice of Filing to comply with California Environmental Quality Act requirements for the proposed Basin Plan amendment. SDRWQCB staff will prepare and circulate a Notice of Public Hearing to announce that the SDRWQCB will consider amendment of the Basin Plan to incorporate the TMDL. SDRWQCB staff will make the revised tentative Basin Plan amendment available to the public.

m. Regional Board Hearing:

SDRWQCB staff will prepare and provide to the SDRWQCB a hearing package consisting of the revised tentative Basin Plan amendment, an Executive Officer Summary Report, and appropriate supporting documents. The SDRWQCB will conduct a public hearing to receive comments on the tentative Basin Plan amendment. SDRWQCB staff will prepare responses to comments received during the comment period. The SDRWQCB will consider adoption of the tentative Basin Plan amendment at a subsequent public meeting.

5. Budget/Products/Completion Dates

Task	Staff Resources (\$\$)	Contracts (\$)	Products	Completion Dates
a	14,700*	--	Written problem statement	08/99
b	14,700*	--	Written numeric target(s)	09/99
c	29,400*	--	Written analysis of sources and loadings	11/99
d	36,700*	--	Written description of proposed loading allocation and responsible parties	03/00**
e	7,400*	--	Written linkage analysis report	03/00
f	7,400*	--	Written description of margin(s) of safety	03/00**
g	14,700*	--	Technical TMDL	06/00
h	N/A	--	Communication with stakeholders	N/A
i	N/A	--	Written report describing TMDL implementation plan	11/00
j	N/A	--	Written monitoring strategy	11/00
k	N/A	--	Staff workshop(s)	02/01
l	N/A	--	Notice of Filing and Notice of Public Hearing	02/01

m	N/A	--	SDRWQCB hearing and adoption of Basin Plan amendment to incorporate TMDL	06/01
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*Assumes Tasks a - g will be completed for a total of \$125,000, i.e. the amount to be provided for each TMDL by USEPA. USEPA TMDL funds will be used only for Tasks a - g.

** Tasks d, e, and f will be completed at the same time, as they are so closely related.

Project: TMDL for San Diego Bay at Seventh Street Channel

1. Description

The Seventh Street Channel portion of San Diego Bay is located adjacent to hydrologic subarea 908.31, as identified in the SDRWQCB Basin Plan. San Diego Bay at Seventh Street Channel is on the 303(d) list for benthic community degradation and toxicity. San Diego Bay is a UWA Category 1 priority. This is a “commitment” technical TMDL, to be completed no later than June, 2001. CZARA management measures 3.3A, 3.5F, 3.6A, and 6C are potentially relevant.

2. Hydrologic Unit Description

Hydrologic Subarea 908.31

3. Purposes/Objectives

Develop TMDL for San Diego Bay at Seventh Street Channel.

4. Tasks

a. Problem Statement:

SDRWQCB staff will prepare a written problem statement which identifies the water quality standard(s) not met, describes the beneficial uses which are impaired or threatened, discusses the nature of the impairment or threat, and identifies the pollutant(s) causing the impairment or threat. Work will include compilation of existing water quality data, creation of a technical advisory group, compilation of a stakeholder list, and initial meetings and/or other communications with the technical advisory group and stakeholders.

b. Numeric Target(s):

SDRWQCB staff will prepare a written report identifying and discussing the numeric water quality target(s) to be achieved by implementation of the TMDL. The numeric target(s) will be used to measure progress towards meeting the water quality standard(s). Work will include development of draft numeric water quality target(s), and meetings and/or other communication with the technical advisory group and stakeholders.

c. Source Analysis:

SDRWQCB staff will prepare a written report characterizing the origin and magnitude of causative pollutant loadings entering San Diego Bay at Seventh Street Channel. The source analysis may be based on field measurements, existing data, water quality models, calculations

and/or estimates. Work will include meetings and/or other communication with the technical advisory group and stakeholders to identify sources, determine contributions from various sources, and evaluate the difficulty of reducing loadings from various sources.

d. Allocations:

SDRWQCB staff will prepare a written report describing proposed causative pollutant loading allocations to point sources, nonpoint sources, and natural background sources. The report will also identify parties responsible for taking the control actions necessary to achieve reductions in causative pollutant loadings. Work will include evaluation of best management practices and meetings and/or other communication with the technical advisory group and stakeholders to determine causative pollutant loading reductions that can be achieved for various sources

e. Linkage Analysis:

In conjunction with development of the proposed allocations (Task d, above), SDRWQCB staff will prepare a written report which documents the relationship of the proposed allocations to the numeric target(s) (developed in Task b, above).

f. Margin of Safety:

In conjunction with development of the proposed allocations (Task d, above), SDRWQCB staff will prepare a written report which describes the margin of safety used in the proposed causative pollutant load allocations to point sources, nonpoint sources, and natural background sources. The margin of safety will take into account uncertainties about the relationship between pollutant loads and the quality of the receiving waters.

g. Technical TMDL Report:

SDRWQCB staff will compile the products of Tasks a - f, above, with revisions as appropriate, and submit the compilation to USEPA as the Technical TMDL Report.

h. Stakeholder Participation:

As discussed above and below, SDRWQCB staff will conduct meetings and/or use other means to communicate with and solicit comments from stakeholders throughout the TMDL process.

i. Implementation Plan:

SDRWQCB staff will prepare a written TMDL implementation plan describing actions to be taken, performance standards, responsible parties, and milestone dates. Work will include meetings and/or other communication with the technical advisory group and stakeholders.

j. Monitoring/Re-evaluation:

Staff will prepare a written strategy for monitoring San Diego Bay at Seventh Street Channel to enable measurement of progress towards meeting the numeric water quality targets and to determine if revision of the TMDL implementation plan (Task i, above) is necessary. Work will include meetings and/or other communication with the technical advisory group and stakeholders to determine monitoring strategy and responsibilities. The monitoring strategy will be incorporated into the implementation plan.

k. Staff Workshops:

SDRWQCB staff will prepare a tentative Basin Plan amendment to incorporate the TMDL into the Basin Plan. SDRWQCB staff will arrange for a scientific peer review panel to review and comment on the tentative Basin Plan amendment. SDRWQCB staff will conduct at least one public workshop to present and receive comments on the tentative Basin Plan amendment. SDRWQCB staff will revise the tentative Basin Plan amendment, as appropriate, based on comments received from the scientific peer review panel and at the workshop(s).

l. Notice of Filing/Hearing:

SDRWQCB staff will prepare and circulate a Notice of Filing to comply with California Environmental Quality Act requirements for the proposed Basin Plan amendment. SDRWQCB staff will prepare and circulate a Notice of Public Hearing to announce that the SDRWQCB will consider amendment of the Basin Plan to incorporate the TMDL. SDRWQCB staff will make the revised tentative Basin Plan amendment available to the public.

m. Regional Board Hearing:

SDRWQCB staff will prepare and provide to the SDRWQCB a hearing package consisting of the revised tentative Basin Plan amendment, an Executive Officer Summary Report, and appropriate supporting documents. The SDRWQCB will conduct a public hearing to receive comments on the tentative Basin Plan amendment. SDRWQCB staff will prepare responses to comments received during the comment period. The SDRWQCB will consider adoption of the tentative Basin Plan amendment at a subsequent public meeting.

5. Budget/Products/Completion Dates

Task	Staff Resources (\$\$)	Contracts (\$)	Products	Completion Dates
a	14,700*	--	Written problem statement	08/99
b	14,700*	--	Written numeric target(s)	09/99
c	29,400*	--	Written analysis of sources and loadings	11/99
d	36,700*	--	Written description of proposed loading allocation and responsible parties	03/00**
e	7,400*	--	Written linkage analysis report	03/00**
f	7,400*	--	Written description of margin(s) of safety	03/00**
g	14,700*	--	Technical TMDL	06/00
h	N/A	--	Communication with stakeholders	N/A

i	N/A	--	Written report describing TMDL implementation plan	11/00
j	N/A	--	Written monitoring strategy	11/00
k	N/A	--	Staff workshop(s)	02/01
l	N/A	--	Notice of Filing and Notice of Public Hearing	02/01
m	N/A	--	SDRWQCB hearing and adoption of Basin Plan amendment to incorporate TMDL	06/01

*Assumes Tasks a - g will be completed for a total of \$125,000, i.e. the amount to be provided for each TMDL by USEPA. USEPA TMDL funds will be used only for Tasks a - g.

** Tasks d, e, and f will be completed at the same time, as they are so closely related.

DIVISION OF WATER QUALITY

BACKGROUND:

DWQ is responsible for compiling information on the status of the state's waters and the activities and priorities of the Regional Water Boards. Typically this is accomplished through the compilation of the 303(d) and 305(b) reports, the consolidated WMI workplan and other grant workplans. These tools provide little help to the public in understanding what the priorities are for water quality management or what the current condition are for the state's waters. In recent years several independent reports have been put together for the lay public by entities outside the water boards (e.g. CalPIRG). These reports have contained errors and required dedication of staff to respond to their conclusions and content. Recent comments regarding the listing of impaired waters and on the continuing planning process of the State Water Board have also indicated a need for a communication vehicle that will convey essential characteristics of the management of water quality throughout the State. It is clear that a need exists to provide a clearer and more easily understood description of our management efforts and status of California's waters. The Division of Water Quality will respond to these needs by directing federal grant funds to support the hiring of a full time and a part time staff to produce a report which is envisioned to be a biennial report on the status of the state's waters. These staff will be skilled in journalism and document lay out and will have technical skills in interpretation of water quality data and data analysis.

TASKS, PRODUCTS, AND MILESTONES:

1. Develop job descriptions:

Job descriptions that conform to relevant administrative procedures will developed for one full time permanent position and one part time limited term position. Job descriptions will be approved by Division of Administrative Services.

2. Announce solicitation:

Job announcements will be posted and distributed by email.

3. Interview and hire:

Interviews will be conducted and offers made to most desirable candidates. All administrative tasks associated with new hires will be conducted in accordance with state administrative procedures.

4. Develop scope of status of state's waters report:

The scope of the subject report will be outlined after discussions with various DWQ, regional board, and other agency staff. The intent is to identify the basic information sources that will be relied on to produce the detailed outline and content of the final report. The target audiences will be described in more detail and key questions or information needs will be identified.

5. Develop detailed outline including initial format concepts and information requirements:

A detailed outline of the content of the report will be developed that includes preliminary ideas about presentation, graphics, overall format, and document length. The outline will be based on a preliminary review of data sources and magnitude of information that may contribute to the report. GIS aspects and needs for the report will be identified and described in detail. These needs will then be transmitted to our contractor supporting TMDL GIS work to produce products appropriate for the draft report.

6. Develop/identify additional information sources (e.g. ICE, CERES) to be used in report:

Sources other than State and Regional Board information will be evaluated for its relevance to the scope of the report. Pertinent materials will be collected for inclusion as a base of reference for the report.

7. Develop data quality requirements for 303(d) list information to be used in report:

The universe of data identified in the previous tasks will be examined to determine statistical methods applied within the data and to evaluate options for additional statistical analysis. A list of pertinent questions will be developed and the data needs to evaluate those questions identified. A set of criteria will be developed for applying the 303(d) listing information to the report contents.

8. Develop data quality requirements for 305(b) list information to be used in report:

A set of criteria will be developed for applying the 305(b) reporting information to the report contents.

9. Solicit comments on data requirements from TMDL roundtable:

The various criteria and assessment and analysis approaches developed for tasks 5,6,and 7 will be circulated to the TMDL roundtable for review and comment. Comments will be considered and a final set of data quality criteria, assessment and analysis approaches to be applied to the contents of the report will be determined.

10. Develop rough draft of report:

A draft report that applies the products of previous tasks will be developed and circulated for comment to the TMDL roundtable.

<u>Schedule:</u>	<u>Date</u>
1. Develop Job descriptions: 1 full time permanent, 1 part time limited term	August 1999
2. Announce solicitation	September 1999
3. Interview and hire	October 1999
4. Develop scope of status of state's waters report.	November 1999
5. Develop detailed outline including initial format concepts and information requirements	December 1999
6. Develop data quality requirements for 303(d) list information to be used in report.	March 2000
7. Develop data quality requirements for 305(b) list information to be used in report.	March 2000
8. Solicit comments on data requirements from TMDL roundtable.	April/May 2000
9. Develop/identify additional information sources (e.g. ICE, CERES) to be used in report.	March 2000
10. Develop rough draft of report.	June 2000

Budget:

<u>Task</u>	<u>Cost</u>
1. Develop Job descriptions: 1 full time permanent, 1 part time limited term	\$10,000**
2. Announce solicitation	\$10,000**
3. Interview and hire	\$10,000**
4. Develop scope of status of state's waters report.	\$10,000*
5. Develop detailed outline including initial format concepts and information requirements	\$20,000
6. Develop/identify additional information sources (ICE, CERES) to be used in report.	\$20,000
7. Develop data quality requirements for 303(d) list information to be used in report.	\$25,000**
8. Develop data quality requirements for 305(b) report information to be used in report.	\$15,000
9. Solicit comments on data requirements from TMDL roundtable.	\$20,000
10. Develop rough draft of report.	\$40,000
Total	\$180,000

* = Task to be paid from Section 319(h) funds for State FY 99-00. (\$10,000 Total)

** = Tasks to be paid with Section 106 Carryover money from State FY 98-99. (\$55,000 Total)
NOTE: \$48,253 of Section 104 funds and \$66,747 of Section 106 funds from the State FY 1999-00 grants will be used for this project.

SECTION TWO-A: COMPLETION OF CARRYOVER SECTION 106 ACTIVITIES FROM FY 1998-99

This Section contains workplans for completion of activities begun in FY 1998-99 but not completed for various reasons. Funding for these activities is from carryover FY 1998-99 Section 106 grant funds. The workplans and funding have been revised by the RWQCBs to include only uncompleted activities. **Note that funding requests are only approximate as the actual amount of carryover funds for each RWQCB will not be available until September 1999.** Regional Boards will continue to charge activities under this section to PCA 403-50

NORTH COAST REGIONAL BOARD (1)

Development of TMDLs for Garcia, Noyo, Big, Mattole, and Gualala Rivers and Redwood Creek

1. OBJECTIVE OF THIS WORKPLAN

The North Coast Region is using a team concept for development of its TMDLs. The contract employee from EPA who developed the Garcia River WQAS will be the lead person overseeing the teams as they first gather information on each watershed, then analyze those data in a limiting factors analysis to develop a watershed assessment. The watershed assessment will be combined with appropriate numeric targets and loading estimates to complete the TMDLs.

The TMDL and implementation plan for the Garcia will be completed and, using that model, a similar plan will be done for Redwood Creek. Technical TMDLs (without implementation plans) will be developed for other North Coast waterbodies. The Noyo River TMDL and work on a Mendocino Coast Watershed Assessment are included in this workplan. In addition, assistance to and coordination with U.S. EPA is included in the workplan for the South Fork Eel and Van Duzen Rivers.

(Note: the costs detailed below are not the only resources being applied to these watersheds. To the degree possible, Nonpoint Source, Forestry, and Basin Planning funds are also being used to address these issues. However, it is anticipated that insufficient funding will be available to fully address the issues, and the TMDLs will be phased, with fine-tuning to occur as data become available.)

2. TASKS

Mendocino Coast Watershed Assessment

As the Ten Mile, Noyo, Big, Albion, and Navarro River watersheds are contiguous and data from any one source generally covers parts of many of the watersheds, the RWQCB and EPA staff propose an area wide assessment of sediment conditions. Existing data will be compiled for the area and may be supplemented by aerial photo analysis if funds allow. This task will be done only to the extent that work does not jeopardize meeting deadlines for the Noyo River TMDL.

Total FY 1999-00 Cost **\$ 35,000**

3. MILESTONES

<u>Deliverable</u>	<u>Completion Date</u>
<u>Mendocino Coast Watershed Assessment</u>	
Data Inventory	May 1999
Preliminary Analysis	Jun 1999
Final Assessment	Mar 2000

CENTRAL COAST REGIONAL BOARD (3)

Lower Salinas River Monitoring Project

The Central Coast Regional Board will develop and implement a monitoring and assessment program for the Lower Salinas River to support watershed planning for this basin. This project will provide data needed for an assessment of the condition of the river basin's waters relative to attainment of water quality standards. Information and data generated will be used for development of TMDLs for impaired water bodies in the Lower Salinas River area, support of the Toxic Hot Spot Cleanup Plan for Moss Landing harbor, development of the Salinas River Watershed Management Action Plan, development of the 305(b) report and the 303(d) list of impaired water bodies, and assessment of nonpoint source pollutants. Data generated will also be used to define issues, set priorities under WMI and provide a baseline of water quality conditions prior to implementation of actions under WMI. Design of the monitoring and assessment program will be coordinated with the State Board's AB1429 data management effort and with design of the Central Coast Regional Monitoring Program.

1. OBJECTIVE OF THIS WORKPLAN

This workplan covers activities to be funded by both the SWRCB and EPA. A Lower Salinas River monitoring program will be designed and implemented and data entered into a data

management system. The water quality of the Lower Salinas will be characterized in an assessment report.

2. TASKS

The following tasks were not completed in FY 1998-99 and are to be completed in FY 1999-00 using carryover funding.

- A. Begin Implementation of Monitoring Plan-Contractor to analyze samples for water quality, sediment quality, tissue bioaccumulation, habitat assessment and rapid bioassessment. Water toxicity data will be funded from other sources. This task will be continued through February 2000 in order to obtain a full year of data.

MILESTONES

Summary of sampling conducted during quarter included in quarterly progress reports. Oct. 99, Jan. 2000 April 2000

COST \$23,800
(All costs for Task A are contract costs for sampling, lab services and data collection)

- B. Enter data collected into a data base management system compatible with the Regional Monitoring Program and with the recommendations of the Statewide Monitoring Strategy Team. This task is being continued into FY 1999-00 due to inability to execute contract for student services.

MILESTONES

Completion of data entry for data collected in FY 1998-99 Dec. 1999

COST \$10,000
(All costs for this task are contract costs for students)

- D. Annual Report summarizing data findings and other information collected to date. This task is being continued into FY 1999-00 due to problems with preceding tasks.

MILESTONES

Annual report	June 1999
Full data characterization report	June 2000
 COST	 \$6,000
 TOTAL COST	 \$39,800

Support for Development of San Lorenzo River, Pajaro River, and Llagas Creek TMDLs

1. OBJECTIVE OF THIS WORKPLAN

Nonpoint source pollution from sedimentation is seriously impacting the resource value of the San Lorenzo River. Initial steps were taken to address sedimentation as part of the San Lorenzo River Watershed Management Plan which was prepared in 1979. A recent update and re-evaluation of the Plan conducted by the County of Santa Cruz Environmental Health Department has confirmed that sedimentation continues to be the most serious water quality concern in the San Lorenzo Watershed. The work herein will complement and greatly expand on the Watershed Plan Update (funded by a Section 205[j] grant) and on a roads erosion control demonstration project (funded by a Section 319[h] grant). Additionally, the work will result in development of a sediment TMDL for the San Lorenzo River.

The Pajaro River and Llagas Creek are listed for nutrient impairment and turbidity. TMDL development will be initiated by conducting a water quality assessment to determine the scope of the problem.

In the Salinas River Watershed, several water bodies are listed on the Section 303(d) list. These listings were originally made based on professional judgment and the Regional Board has little information in its files describing the extent or nature of the impairments. The Regional Board needs to document the water quality conditions within these two watersheds. Grant funds will be used to collect and evaluate existing data on these waters and the Section 303(d) list will be revised accordingly.

2. TASKS

The following tasks were not completed in FY 1998-99 and are to be completed in FY 1999-00 using carryover funding.

<u>Tasks</u>	<u>Costs</u>
	<u>PYs</u> <u>Contract</u>
A. TMDL Development for San Lorenzo River	
Task A-5. Establish TMDL-develop TMDL, identify BMPs, allocate responsibility for BMP implementation, establish sediment reduction and implementation targets,	

identify implementation strategies	\$13,000
Task A-6. Complete TMDL Report-prepare a report that includes the findings and recommendations from Tasks A-3 through A-5.	\$ 5,000
B. Conduct Preliminary Monitoring and Assessment	
Task B-1. Collect water quality information on the Salinas River watershed from government agencies, environmental groups, and others (student contract)	\$10,000
TOTAL COST	\$28,000

3. MILESTONES

	<u>Deliverables</u>	<u>Date of Completion</u>
Task A-5.	Status of Sediment TMDL	Aug. 1999
Task A-6.	Report Completion	Sept. 1999
Task B-1.	Complete a database file or spreadsheet of compiled data with numeric water quality values, reference or citation, and other relevant information (completion date dependent on getting money into student contract by Sept. 1999)	Dec. 1999

Rationale for Carryover of Activities--Above activities were carried over to FY 1999-00 due to delays in executing contracts. Certain FY 1998-99 task descriptions and milestones have been deleted as they have been integrated into a Section 319(h) funded project to avoid duplication of effort/spending.

CENTRAL VALLEY REGIONAL BOARD (5)

Development of TMDLs for Diazinon and Chlorpyrifos in the Delta

1. OBJECTIVE OF THIS WORKPLAN

Monitoring studies over the past seven years have documented diazinon and chlorpyrifos in the Delta and tributaries at levels of concern. It is a widespread problem that is best addressed through a coordinated effort involving agencies and diverse stakeholders. The Clean Water Act mandates that the Regional Board develop TMDLs for pollutants impairing waterbodies and there is a State Board Management Agency Agreement with the Department of Pesticide Regulation (DPR) giving DPR lead agency status in matters concerning the regulation of pesticide use. A phased approach seems most appropriate for developing diazinon and chlor

TMDLs for the Delta. The first step will be to develop a TMDL Report that contains all the TMDL elements required by USEPA.

To begin the process, it will be necessary to bring together all of the appropriate agencies and develop a strategy for preparing the TMDL report. At the same time, staff will work with U.C. Extension, chemical manufacturers and other entities to develop best management practices (BMPs) that can be implemented to reduce the amount of diazinon and chlorpyrifos in surface waters from both urban and agricultural sources. Staff will serve on Technical Advisory Committees, comment on BMP development, and review data to evaluate the measure effectiveness and economic feasibility. Simultaneously, more information needs to be collected to examine the ecological significance of the pesticide exceedances. Staff will encourage the collection of ecological signifi data by serving on a technical advisory committee dedicated to that task.

The Sacramento River Watershed Program is beginning to develop information required for preparing a TMDL Report for the Sacramento River. Staff will be using that effort as the model for organophosphate pesticide TMDL report development and will start a similar process in the San Joaquin River on a delayed schedule. These two programs will need to be coordinated for the OP TMDL Report effort in the Delta. Staff will work with stakeholders to develop a strategy to coordinate completion of the TMDL Report for OP from two major tributaries to the Delta.

2. TASKS

- | | | |
|-----------|--|-----------------|
| A. | Set up Coordinated Process for TMDL Report Development | \$10,000 |
| | <ol style="list-style-type: none"> 1. Contact appropriate agencies including U.S. EPA (watershed and FIFRA sections), DPR, SWRCB, and local agencies to set up meetings and discuss the necessary elements of a TMDL report. 2. Involve interested stakeholders such as SRWP, Urban Pesticide Committee (UPC), and chemical registrants. 3. Work with UPC to develop elements of TMDL reports for urban creeks. | |
| B. | Development of BMPs | \$20,000 |
| | <ol style="list-style-type: none"> 1. Serve on TAC for UC Extension BMP development studies. 2. Review and evaluate monitoring data from UC Extension and chemical company BMP development studies. | |
| C. | Assessment of Pesticide Impacts | \$10,000 |
| | <ol style="list-style-type: none"> 1. Work with Interagency Ecological Program Contaminants Effect Project Workteam to | |

- determine ecological significance of pesticide levels.
- 2. Evaluate monitoring studies for Arcade Creek.
- 3. Coordinate with City of Sacramento on urban runoff program.

- D. Development of Strategy** \$25,000
- 1. Work with DPR, SWRCB, U.S. EPA, and other agencies and interested stakeholders on developing a strategy.
 - 2. Coordinate with CALFED Water Quality Program.

TOTAL COST **\$65,000**

3. MILESTONES

<u>Deliverables</u>	<u>Completion Dates</u>
Task A.	
1. Agendas and minutes from meetings	Dec. 1999
Task B.	
1. TAC meeting agendas and minutes	Quarterly
2. Staff comments on monitoring results	June 2000
Task C.	
1. Workteam meeting agendas	Quarterly
2. Comments on monitoring results	June 2000
Task D.	
1. Diazinon and chlorpyrifos strategy	June 2000

SANTA ANA REGIONAL BOARD (8)

Newport Bay/San Diego Creek TMDLs for Nutrients, Toxics and Pathogens.

1. OBJECTIVE OF THIS WORKPLAN

Phase II TMDL work for nutrients will focus on extensive monitoring and modeling to validate the Phase I target and implementation plan. Regional Board staff is also initiating the process to develop pathogen and toxics TMDLs, which are required to be completed by January 2000 and January 2002, respectively.

For the pathogen TMDL, Board staff is planning on working closely with the Orange County Health Care agency (which has been monitoring pathogens in Newport Bay for a number of years) to develop an appropriate strategy for reducing pathogens in the watershed.

For the toxics TMDL, Orange County and the Transportation Corridor Agencies have been awarded Section 319(h) and Section 205(j) grants to undertake a toxicity testing and toxicity identification evaluation monitoring program initiated in order to identify the source(s) of toxics in the watershed. The evaluation monitoring program proposed under the Section 205(j) and Section 319(h) proposals will be the primary tool to assist the Regional Board in the development of the toxics TMDL for San Diego Creek/Newport Bay. The work planned under the grants will not enable completion of the toxics TMDL; therefore additional funds will be needed.

2. TASKS

All nutrient, pathogen and toxics TMDL related activities that need to be performed are shown on the attached worksheets. These activities, which are consistent for each TMDL, have been defined in the TMDL instruction set for the WMI process.

Revised total cost for this task is **\$80,000** of which **\$60,000** has been allocated to support the Region’s TMDL effort (**\$20,000** will be used to support the Regional Board’s permit program). An amount of **\$45,000** will be used to support staff activities for the nutrient, pathogen and toxics TMDL. The remaining **\$15,000** will go to augment the existing laboratory and student assistant contracts.

Nutrient TMDL - Phase II

	<u>TASKS</u>		<u>COSTS</u>	
			<u>PYs</u>	<u>Contract</u>
A. Stakeholder and Public Participation:			\$ 5,000	--
Participation in the existing Nutrient TMDL Workgroup				
B. Conduct Assessment and Evaluation:			\$ 20,000	\$ 7,500
1. Develop watershed nutrient monitoring program				
2. Conduct watershed nutrient monitoring				
3. Calibrate watershed and estuary model				

Pathogen TMDL - Phase I

	<u>TASKS</u>		<u>COSTS</u>	
			<u>PYs</u>	<u>Contract</u>
C. Stakeholder and Public Participation:			\$ 5,000	--
Coordinate and Participate in Pathogen TMDL Workgroup				

D. Conduct Assessment and Evaluation:	\$ 10,000	\$ 7,500
1. Develop watershed pathogen monitoring program		

Toxics TMDL - Phase I

	<u>TASKS</u>		<u>COSTS</u>	
			<u>PYs</u>	<u>Contract</u>
E. Stakeholder and Public Participation:			\$ 5,000	--
Participation in the Toxics TMDL TAC				

3. MILESTONES

<u>Deliverable</u>	<u>Date of completion</u>
Task A. Semi-annual reports summarizing nutrient TMDL	Dec. 1998, Jun. 1999
<u>Deliverable</u>	<u>Date of completion</u>
workgroup activities	
Task B-1. Watershed nutrient monitoring plan (with QAPP)	Jun. 1999
Task B-2. Semi-annual report summarizing nutrient monitoring data	Jun. 1999
Task B-3. Semi-annual report summarizing modeling effort	Dec. 1998, Jun. 1999
Task C. Semi-annual reports summarizing stakeholder activities	Dec. 1998, Jun. 1999
Task D. Pathogen monitoring plan (with QAPP)	Jun. 1999
Task E. Semi-annual report summarizing toxics TAC Activities	Jun. 1998, Dec. 1998

TMDL Development for Newport Bay and Implementation of Monitoring Plan in Selected Watersheds

U.S. EPA and the interest group "Defend The Bay" have entered into a Consent Decree establishing schedules for developing TMDLs for the Newport Bay Watershed for a number of water quality parameters. The Regional Board is therefore focussing its efforts on developing TMDLs for nutrients, pathogens, and toxic substances for the Newport Bay watershed. A Phase I TMDL for nutrients has been completed. The Consent Decree further specifies that a pathogen TMDL is to be completed by January 2000 and a toxics TMDL by January 2002.

Regional Board staff intends to implement monitoring in selected watersheds to support its WMI activities, including TMDLs. The monitoring program will evaluate the attainment of water quality

standards and assist in updating the Regional water quality assessment and the Section 303(d) list of impaired water bodies. The monitoring program will be developed in close coordination with other monitoring activities including discharger self-monitoring, TMDL monitoring, and storm water monitoring, and the USGS National Ambient Water Quality Assessment for the Santa Ana Basin, which will be conducted in the next decade.

1. OBJECTIVE OF THIS WORKPLAN

Regional Board staff will complete Phase II of the Newport Bay TMDL for nutrients, which will include a review of appropriate nutrient objectives for San Diego Creek and Newport Bay and establishment of an extensive monitoring program. The BASINS/QUAL2E model developed as part of the Phase I nutrient TMDL will be refined and used to evaluate the appropriateness of the Phase I nutrient reduction targets and the implementation plan.

With regard to the toxics and pathogen TMDLs, Regional Board staff will continue and complete development of a pathogen TMDL and continue development of the toxics TMDL. Regional Board staff will also coordinate and participate in both pathogen and toxics stakeholder groups.

The Anaheim Bay, Big Bear Lake, and Lake Elsinore watersheds are to be assessed as part of the Year 2000 Water Quality Assessment Update. Monitoring and assessment activities will be conducted in these watersheds and the data will be used to update the Section 305(b) report and the Section 303(d) list.

2. TASKS

A. Refine Nutrient Watershed Model \$10,000

The BASINS/QUAL2E model, which was developed by Tetra Tech, Inc., under contract to U.S. EPA, will be refined to better reflect water quality conditions in San Diego Creek in order to assist with Phase II implementation of the nutrient TMDL. Specific activities will include updating the model with more recent water quality data, hydrologic data, and land use designations.

B. Develop Pathogen TMDL \$18,000

Regional Board staff will develop a pathogen TMDL for incorporation into the Basin Plan. Activities include developing technical staff reports, responding to comments, and providing staff support for Basin Plan approval by SWRCB, OAL, and U.S. EPA

C. Participate in TMDL Stakeholder Groups \$ 5,000

Regional Board staff will lead bimonthly meetings of existing nutrient TMDL workgroup. Regional Board staff will organize and lead monthly meetings of

pathogen workgroup and will participate in existing Toxics TMDL Technical Advisory Committee meetings.

D. Conduct Toxicity Testing for Toxics TMDL \$51,500

Water column toxicity testing and/or toxicity identification evaluations will be conducted in the Newport Bay/San Diego Creek watersheds. The data will be used in the development of the Toxics TMDL.

NOTE: All costs for this task are contract costs.

E. Develop Regional Monitoring Plan \$12,000

1. Summarize stakeholder monitoring efforts for the Anaheim Bay, Big Bear Lake, and Lake Elsinore Watershed Management Areas (WMA), including dischargers, citizen groups, and other governmental agencies. Identify data needs and data gaps.
2. Develop statistically appropriate monitoring plan for the Anaheim Bay, Big Bear Lake, and Lake Elsinore WMAs, taking into consideration existing monitoring programs, watershed water quality issues, data needs for evaluating beneficial use protection, and long term monitoring and assessment needs. The plans will include: station locations, sampling frequency, water quality parameters to be sampled, protocols, QA/QC protocols, analytical methods, hydrologic data collection, and biological sampling parameters, including tissue sampling, bioassessment, and bioassays, if warranted.

F. Implement Monitoring Program \$34,000

Initiate water quality monitoring according to plan for the Anaheim Bay, Big Bear Lake, and Lake Elsinore watersheds.

NOTE: \$14,000 of the funding for this task is for a contract for students.

MILESTONES AND TOTAL COST

Task A.	
Semi-annual report on model status	Dec. 1999, Jun. 2000
Incorporate new water quality and land use data into model	Jun. 2000

Task B. Semi-annual report on TMDL status	Dec. 1999
Task C. Semi-annual reports on workgroup activities including meeting agendas and notes.	Dec. 1999, Jun. 2000
Task D. Execute Contract for toxicity testing Annual report on toxicity testing and/or toxicity identification evaluation results	Jun. 1999 Jun. 2000
Task E. Summary report on existing monitoring programs, monitoring needs, and data gaps. WMA monitoring plans with QAPP	Sept. 1999 Oct. 1999
Task F. Annual report summarizing monitoring conducted in the Anaheim Bay, Big Bear Lake, and Lake Elsinore watersheds	Jun. 2000
TOTAL COST	\$65,000 (STAFF) \$65,500 (CONTRACTS) \$130,500 (TOTAL)

SAN DIEGO REGIONAL BOARD (9)

Bioassessment Program for Inland Surface Waters

Historically, water quality monitoring of inland surface waters in the San Diego Region has been limited to occasional collection and chemical analysis of water samples. However, starting in the late 1970's, monitoring was expanded to include periodic analysis of fish tissues for the presence of bioaccumulated substances. More recently, NPDES Storm Water Co-Permittees have performed water column chemistry and a limited number of chronic toxicity tests on some watercourses. While existing water sampling data provide a measure of water quality conditions at each site, they do not provide a direct measure of the overall health of the aquatic habitat for these water bodies.

To fill this critical void, the Regional Board intends to initiate an ambient monitoring program to measure the biological and physical condition of the Region's inland surface waters. The California

Stream Bioassessment Procedure (CSBP), developed by the California Department of Fish and Game, will be used for the monitoring program. The CSBP is a regional adaptation of U.S. EPA's Rapid Bioassessment Protocols and is recognized as California's standardized bioassessment procedure. The CSBP is a cost-effective tool that utilizes measures of the stream's benthic macroinvertebrate (BMI) community and its physical/habitat structure. BMIs can have a diverse community structure with individual species residing within the stream for a period of months to several years. They are also sensitive, to varying degrees, to temperature changes, dissolved oxygen, sedimentation, scouring, nutrient enrichment, and chemical and organic pollution. Biological and physical assessments integrate the effects of water quality conditions over time, are sensitive to multiple aspects of water and habitat quality, and provide the public with more familiar expressions of ecological health.

1. OBJECTIVE OF THIS WORKPLAN

The bioassessment program will evaluate the biological and physical integrity of targeted inland surface waters in the San Diego Region, and will be designed to meet an obligation to assess the condition of the Region's waters relative to attainment of water quality standards. Information developed will be used for the Section 305(b) Water Quality Assessment, the Section 303(d) list of impaired water bodies, development of TMDLs, assessments of nonpoint sources, and assessments of effectiveness of nonpoint source management measures. Information will also be used to define issues, set priorities, and evaluate effectiveness of actions under the Watershed Management Initiative. The Regional Board will utilize the technical guidance and laboratory support of the DFG Water Pollution Control Laboratory in Rancho Cordova.

This ambient bioassessment program will put initial emphasis on biological community structure monitoring; only after the biological information indicates impairment will samples be chemically analyzed. The Regional Board intends to initially use its funds and contract laboratory for any supporting chemical analyses. It is assumed that municipal storm water committees, the Regional Board, and citizen volunteer monitoring groups will be responsible for biological monitoring. The program will be in concert with the San Diego Region's *Watershed Management Plan* and will be focussed on the Aliso Creek, Santa Margarita River, and San Diego Bay (Sweetwater River) watersheds targeted for 1996-99, the Carlsbad and San Luis Rey watersheds targeted for 1998-99, and then on the Los Penasquitos Creek watershed targeted for 1999-2000. Other areas to be sampled are within the Escondido Creek and San Diego River watersheds.

The Regional Board will use the information gained from these bioassessments to identify areas of stream impairment and most likely causes. For the coastal lagoons identified as impaired, the bioassessments will help to identify those areas of the influent streams which are most significant contributors of pollutants. With the accompanying data on water column and sediment chemistry provided by various sources, the Regional Board can initiate a scientifically based TMDL development for each of the impaired streams and coastal water bodies. Regional Board staff will also conduct a hydrogeomorphic functional assessment at

each of the monitoring sites using the procedures developed in the *"Hydrogeomorphic Functional Assessment of Riverine Waters/Wetlands in the Santa Margarita Watershed"* guidebook.

2. TASKS

The full project to develop and implement an ambient bioassessment program will take about 2-1/2 years. The tasks specified herein are for the FY 1999-2000 period. Activities began in FY 1997-98 and continued through FY 1998-1999 under a preceding grant.

a. Collect Samples and Process Biological and Physical Data

One BMI sample will be collected along a transect in each of three randomly selected riffles or, if only one riffle is available, along three randomly selected transects.

Taxonomic lists and functional feeding group composition, and the following bioassessment metrics will be generated: taxa richness, Shannon Diversity Index, EPT taxa, EPT Index, modified Hilsenhoff Family Biotic Index, percent dominant taxon, and relative abundance. The following physical/chemical measurements will be collected at each site to help describe and understand the biological condition: water temperature, pH, turbidity, conductivity, stream flow velocity, substrate complexity, and canopy cover. Samples will be analyzed for nutrients and TDS as appropriate. The location of all sites will be documented using GPS equipment and photographs.

MILESTONES

Collect and Process Fall 1999 Samples

Collect and Process Spring 2000 Samples

COST

\$44,400 (DFG Contract)

b. Continue to implement QA/QC Procedures and Contingency Station Expansion

The DFG laboratory will produce a Quality Assurance Project Plan including Standard Operating Procedures. Contingency stations will be established in case some of the original sites cannot be sampled due to inclement hydrologic or atmospheric conditions. Contingency sites will also be available if bioassessment results indicate the need to sample additional sites.

MILESTONES

10% QA/QC for 1999 Samples

COST

\$5,000 (DFG Contract)

c. Analyze Data and Write Year Two Report and Final Report

Biological data analysis will follow U.S. EPA's multiple metric approach and will consist of the following steps:

1. Describe the BMI community structure by examining the most abundant organisms and their functional feeding composition.
2. Determine the most appropriate biological metrics by examine their correlation with watershed characteristics and physical/chemical parameters.
3. Rank stations from best to worst according to their values for each appropriate biological metric.
4. Test the appropriateness of the ranking by examining upstream land uses and known point and nonpoint sources of pollution.
5. Further test the metrics and ranking by repeating the data analysis procedures for following sample events. This will determine the influence of seasonal and annual variability.

Ultimately, an Index of Biological Integrity (IBI) will be developed for the Region's watersheds. The IBI will consist of biological metrics which best describe stream conditions relative to human activity. Physical data will be analyzed separately from the biological data, but will follow similar steps to produce an Index of Physical Integrity for the Region's watersheds. A second annual report will be produced and compared to the first year annual report data within a final report.

MILESTONES

Produce Year Two (1999/2000) Report	April 2000
Final Project Report	June 2000

COST **\$12,600 (DFG Contract)**

d. Coordinate Bioassessment with Stakeholder Monitoring

Although this is only a short-term project, bioassessment must be long term if it will ever lead to an effective water quality monitoring tool or the adoption of biocriteria. Building partnerships with other agencies, institutions and watershed stakeholders is essential to continue bioassessment activities.

The CDFG will direct the technical development and application of citizen monitoring data, ensure

biomonitoring data format for stakeholders is consistent with CDFG format and utilize an appropriate electronic storage format for biological data and develop a bioassessment database which will be easily accessed by stakeholders. These efforts will be assured by conducting several bioassessment training classes in the San Diego Region, holding coordination meetings and providing laboratory consultation and sample validation.

COST **\$22,000 (DFG Contract)**

SUMMARY OF PROJECT COST:

Task a. \$44,400

Task b. \$5,000

Task c. \$12,600

Task d. \$22,000

***Overhead* \$16,000**

TOTAL COST (including overhead) \$100,000 (all DFG Contract)

DIVISION OF WATER QUALITY

See Section Two (Division of Water Quality)

SECTION THREE: NEW SECTION 104(B)(3) TMDL ACTIVITIES

This section contains TMDL development projects which are to be funded by the FY 1999-00 Section 104(b)(3) grant. These are TMDLs which are part of the “June 2001 Commitment”. Regional Boards will charge activities under this section to Task 253, which is a new task set up especially to track TMDL expenditures by individual TMDL for purposes of developing eventual “cost factors”. The “first” TMDL under this Section will be given PCA Code 253-01, 02, and 03; the “second” TMDL will be given PCA Code 253-04, 05, 06; the third TMDL will be given PCA Code 253-07, 08, 09, etc., and charges made accordingly. Codes 01, 04, 07, etc. are for Technical TMDL Development; codes 02, 05, 08 are for TMDL Implementation Planning; codes 253-03, 06, 09 are for TMDL Implementation/Monitoring.

LOS ANGELES REGION (4)

Project: Calleguas Creek Chloride TMDL

1. Description

Mugu Lagoon, located at the mouth of the watershed, is one of the few remaining significant saltwater wetland habitats in southern California. Calleguas Creek supports an important agricultural industry, both through direct diversion and groundwater recharge. Excessive salts

threaten this beneficial use, particularly for many salt sensitive crops grown in the area. Further increases in salts threaten this beneficial use. This project will finalize the Chloride TMDL for Calleguas Creek. Tasks will include the completion of load allocations and development of a technical TMDL. Calleguas Creek is a Unified Watershed Assessment Priority.

2. Hydrologic Unit Description:

3. Purpose/Objectives

Adoption of TMDL and approval of Basin Plan amendment for Calleguas Creek Chloride TMDL.

4. Tasks

a. Problem Statement

Calleguas Creek supports an important agricultural industry, both through direct diversion and groundwater recharge. Excessive salts threaten this beneficial use. Chloride is a problem in the creek during low flow periods when there is little or no natural flow. Chloride is also impacting groundwater, which interacts extensively with the creek. The problem statement is being completed with carryover FY 1998-99 Section 104 funds.

b. Numeric Target

The numeric target for this TMDL is based on the objectives for agricultural beneficial use. The numeric targets for this TMDL are being completed with carryover FY 1998-99 funds.

c. Source Analysis

Source Analysis will be conducted by reviewing and analyzing the following sources of data:

- Regional Board Ambient Water Quality Database
- Major NPDES permit monitoring reports
- USGS monitoring and flow data
- United Water Company monitoring data
- Calleguas Watershed Group Characterization Study

Source Analysis will be completed with carryover FY 1998-99 funds.

d. Allocations

The load allocations will be developed using a mass balance model. The initial work on the model has been completed and will be distributed to stakeholders in April. The load allocations will be completed by the end of July 1999.

e. Linkage Analysis

The linkage analysis will be complete by evaluating different load allocations as inputs into the mass balance model. Stakeholder input will also be needed to refine assumptions. The linkage analysis will be completed by the end of July 1999.

f. Margin of Safety

The margin of safety will be based on an evaluation of the level of uncertainty calculated in the load allocation and linkage analysis. The margin of safety will be developed by the end of July 1999.

g. Technical TMDL Report

Documentation of tasks a-f will be compiled and submitted to US EPA and the State Board by the end of September 1999.

h. Stakeholder Participation

Stakeholder participation is an ongoing part of the process throughout the development of the TMDL. Staff will solicit participation for tasks c,d,e,i,j,m.

i. Implementation Plan

In conjunction with the stakeholders, an implementation plan and a strategy to develop implementation measures will be developed using the load allocations identified in task d that will meet the numeric targets from b. The implementation plan will be completed by the end of August 1999.

j. Monitoring/Re-evaluation

A monitoring program will be developed to assess the future success of the implementation measures from task i. Development of the monitoring program will be completed by the end of August 1999.

k. Staff Workshops

The following public workshops will be conducted:

- Stakeholder workshop July 1999
- Public Workshop September 1999

l. Notice of Filing/Hearing

Public notice for the Regional Board Hearing will be made at least 45 days prior to the meeting date. A copy of the Draft TMDL will be sent to State Board for peer review by the end of October 1999.

m. Regional Board Hearing

Consideration of the TMDL is scheduled for the February 2000 Regional Board Meeting.

5. Budget/Products/Completion Dates

Task	Staff Resources (\$\$)	Contracts (\$)	Products	Completion Dates
A			Problem Statement Write-up	May 1999
B			Numeric Targets	May 1999
C			Source Analysis	June 1999
D	\$15,000		Allocations	July 1999

E	\$15,000		Linkage Analysis	July 1999
F	\$15,000		Margin of Safety	July 1999
G	\$16,000		Technical TMDL report	September 1999
H	\$10,000		Stakeholder Participation	
I			Draft Implementation Plan	August 1999
J			Draft Monitoring/Re-evaluation	August 1999
K	\$16,000		Staff Workshops	
L			Notice of Filing	December 1999
M			Regional Board Hearing	February 2000
	\$87,000	Total		

Project: Malibu Creek Coliform TMDL

1. Description

The Malibu Creek and Lagoon system and associated beach activities (surfing and swimming) subject the public to a serious health risk from pathogens. The RWQCB will finalize the Coliform TMDL for Malibu Creek. Tasks include the development of load allocations and development of a technical TMDL. Santa Monica Bay is a Unified Watershed Assessment Priority.

2. Hydrologic Unit Description:

3. Purpose/Objectives

Adoption of a Coliform TMDL for Malibu Creek.

4. Tasks

a. Problem Statement

Malibu Creek and Lagoon system and the associated beach activities (surfing and swimming) subject the public to a serious health risk from pathogens. This issue is very high profile, political and controversial. Expected sources include horse properties, septic systems, birds, and urban runoff. The problem statement is being completed with FY 1998-99 funds.

b. Numeric Target

The numeric target for this TMDL will be based on the county Health Department's criteria for beach closures. The numeric targets for this TMDL are being completed with FY 1998-99 funds.

c. Source Analysis

The first step in the Source Analysis will be conducted by reviewing and analyzing the following sources of data:

- Regional Board Ambient water quality database
- Major NPDES permit monitoring reports

- Coordinated Stakeholder Watershed Monitoring
 - Septic tank study by City of Malibu
- Most of the above data is in hardcopy format and will require data entry prior to analyzing. Focussed data analysis and possible data collection efforts will be used to identify and/or confirm sources. Source Analysis is scheduled for completion by the end of July 1999.

d. Allocations

The load allocations will be based on counts, as mass does not make sense, due to the nature of contamination. The load allocations will be completed by the end of September 1999.

e. Linkage Analysis

The linkage analysis will be completed by evaluating different load allocations. Stakeholder input will also be needed to refine assumptions. The linkage analysis will be completed by the end of September 1999.

f. Margin of Safety

The margin of safety will be based on an evaluation of the level of uncertainty calculated in the load allocation and linkage analysis. The margin of safety will be developed by the end of September 1999.

g. Technical TMDL Report

Documentation of tasks a-f will be compiled and submitted to US EPA and the State Board by the end of November 1999.

h. Stakeholder Participation

Stakeholder participation is an ongoing part of the process throughout the development of the TMDL. Staff will solicit participation for tasks c,d,e,i,j,m.

i. Implementation Plan

In conjunction with the stakeholders, an implementation plan will be developed using the load allocations identified in task d that will meet the numeric targets from b. The implementation plan will be completed by the end of November 1999.

j. Monitoring/Re-evaluation

A monitoring program will be developed to assess the success of the implementation measures from task i. The monitoring program will be completed by the end of November 1999.

k. Staff Workshops

The following public workshops will be conducted:

- Stakeholder workshop August 1999
- Stakeholder workshop October 1999
- Public Workshop January 2000

l. Notice of Filing/Hearing

Public notice for the Regional Board Hearing will be made at least 45 days prior to the meeting date. A copy of the Draft TMDL will be sent to State Board for peer review by the end of March 2000.

m. Regional Board Hearing

Adoption of the TMDL is scheduled for the June 2000 Regional Board Meeting.

5. Budget/Products/Completion Dates

Task	Staff Resources (\$\$)	Contracts (\$)	Products	Completion Dates
a			Problem Statement Write-up	May 1999
b			Numeric Targets	June 1999
c	\$10,000		Source Analysis	July 1999
d	\$14,000		Allocations	September 1999
e	\$14,000		Linkage Analysis	September 1999
f	\$14,000		Margin of Safety	September 1999
g	\$16,000		Technical TMDL report	November 1999
h	\$10,000		Stakeholder Participation	
i			Draft Implementation Plan	November 1999
j			Draft Monitoring/Re-evaluation	November 1999
k	\$15,000		Staff Workshops	
l			Notice of Filing	March 2000
m			Regional Board Hearing	June 2000
	\$93,000	Total		

Project: Los Angeles River Trash TMDL

1. Description

The Los Angeles River Watershed is one of the more diverse watersheds in terms of land use patterns; the River travels 55 miles from its point of origin to the Pacific Ocean between the City of Long Beach and the Port of Long Beach. Approximately 324 square miles of the watershed are covered by forest or open space land including the area near the headwaters, which originate in the Santa Monica, Santa Susana, and San Gabriel Mountains. The rest of the watershed is highly developed. Due in part to this development, the river is impacted by a large amount of trash. The funding for this project would finalize a Trash TMDL for Los Angeles River. Tasks include the completion of Source Quantification, development of load allocations, development of an implementation plan, preparation of draft final document, conducting public workshops, and Regional Board hearing.

2. Hydrologic Unit Description:

3. Purpose/Objectives

Adoption of Trash TMDL for Los Angeles River.

4. Tasks

a. Problem Statement

Large portions of the Watershed are highly developed. Due in part to this development, the River is impacted by a large amount of trash. This project will be the model for urban trash TMDLs in this and possibly other Regions. The problem statement is being completed with FY 1998-99 funds.

b. Numeric Target

The numeric target for this TMDL is expected to be zero. The schedule for meeting the target will be developed in conjunction with stakeholders. The numeric targets for this TMDL are scheduled for completion by the end of August 1999.

c. Source Analysis

Source Analysis will be conducted by reviewing and analyzing the following sources of data:

- Municipal Storm water Permit data
- Pilot project being conducted by CalTrans
- Special Studies being conducted by stakeholders

The information on rates of deposition of trash is not well developed, and will require a large amount of interaction with stakeholders to reach an acceptable approach. Source Analysis is scheduled for completion by the end of September 1999.

d. Allocations

The load allocations will be developed in coordination with stakeholders. The load allocations will be completed by the end of November 1999.

e. Linkage Analysis

The linkage analysis will be completed by evaluating different load allocations. Stakeholder input will also be needed to refine assumptions. The linkage analysis will be completed by the end of November 1999.

f. Margin of Safety

The margin of safety will be based on an evaluation of the level of uncertainty calculated in the load allocation and linkage analysis. The margin of safety will be developed by the end of November 1999.

g. Technical TMDL Report

Documentation of tasks a-f will be compiled and submitted to US EPA and the State Board by the end of March 2000.

h. Stakeholder Participation

Stakeholder participation is an ongoing part of the process throughout the development of the TMDL. Staff will solicit participation for tasks c,d,e,i,j,m.

i. Implementation Plan

In conjunction with the stakeholders, an implementation plan and a strategy to develop implementation measures will be developed using the load allocations identified in task d that will meet the numeric targets from b. The implementation plan will be completed by the end of February 2000.

j. Monitoring/Re-evaluation

A monitoring program will be developed to assess the success of the implementation measures from task i. The monitoring program will be completed by the end of February 2000.

k. Staff Workshops

The following public workshops will be conducted:

- Stakeholder workshop July 1999
- Stakeholder workshop September 1999
- Stakeholder workshop November 1999
- Public Workshop April 2000
-

l. Notice of Filing/Hearing

Public notice for the Regional Board Hearing will be made at least 45 days prior to the meeting date. A copy of the Draft TMDL will be sent to State Board for peer review by the end of May 2000.

m. Regional Board Hearing

Adoption of the TMDL is scheduled for the August 2000 Regional Board Meeting.

5. Budget/Products/Completion Dates

The trash TMDL for the Los Angeles River and Ballona Creek are being done concurrently, allowing for a substantial amount of cost sharing between the two TMDLs.

Task	Staff Resources (\$\$)	Contracts (\$)	Products	Completion Dates
a			Problem Statement Write-up	June 1999
b	\$6,000		Numeric Targets	August 1999
c	\$6,000		Source Analysis	September 1999
d	\$7,000		Allocations	November 1999
e	\$6,000		Linkage Analysis	November 1999
f	\$6,000		Margin of Safety	November 1999
g	\$8,000		Technical TMDL report	March 2000
h	\$7,000		Stakeholder Participation	

i			Draft Implementation Plan	
j			Draft Monitoring/Re-evaluation	
k	\$17,000		Staff Workshops	
l			Notice of Filing	
m			Regional Board Hearing	
	\$63,000	Total		

Project: Ballona Creek Trash TMDL

1. Description

Ballona Creek is underground or completely channelized to the ocean except for the estuarine portion, which has a soft bottom. While at one time it drained into a large wetlands complex, it now has no direct connection to the few wetlands remaining in the area although tide gates exist in the channel which connects to Ballona Wetlands. However, Ballona Creek may more often affect the nearby wetlands due to wave action moving trash, suspended material and dissolved contaminants from the ocean to the nearby Ballona Wetlands and Marina Del Rey Harbor, within which complex Ballona Lagoon is located.

The following tasks are needed to finalize a Trash TMDL for Ballona Creek. Tasks include the completion of Source Quantification, development of load allocations, development of an implementation plan, preparation of a draft final document, conducting public workshops, and preparation for Board presentation.

2. Hydrologic Unit Description:

3. Purpose/Objectives

Adoption of a Trash TMDL for Ballona Creek.

4. Tasks

a. Problem Statement

Large portions of the Watershed are highly developed. Due in part to this development, the Creek is impacted by a large amount of trash. The problem statement is being completed with FY 1998-99 funds.

b. Numeric Target

The numeric target for this TMDL is expected to be zero. The schedule for meeting the target will be developed in conjunction with stakeholders. The numeric targets for this TMDL are scheduled for completion by the end of August 1999.

c. Source Analysis

Source Analysis will be conducted by reviewing and analyzing the following sources of data:

- Municipal Storm water Permit data

- Pilot project being conducted by CalTrans
- Special Studies being conducted by stakeholders

The information on rates of deposition of trash is not well developed, and will require a large amount of interaction with stakeholders to reach an acceptable approach. Source Analysis is scheduled for completion by the end of September 1999.

d. Allocations

The load allocations will be developed in coordination with stakeholders. The load allocations will be completed by the end of November 1999.

e. Linkage Analysis

The linkage analysis will be completed by evaluating different load allocations. Stakeholder input will also be needed to refine assumptions. The linkage analysis will be completed by the end of November 1999.

f. Margin of Safety

The margin of safety will be based on an evaluation of the level of uncertainty calculated in the load allocation and linkage analysis. The margin of safety will be developed by the end of November 1999.

g. Technical TMDL Report

Documentation of tasks a-f will be compiled and submitted to US EPA and the State Board by the end of March 2000.

h. Stakeholder Participation

Stakeholder participation is an ongoing part of the process throughout the development of the TMDL. Staff will solicit participation for tasks c,d,e,i,j,m.

i. Implementation Plan

In conjunction with the stakeholders, an implementation plan and a strategy to develop implementation measures will be developed using the load allocations identified in task d that will meet the numeric targets from b. The implementation plan will be completed by the end of February 2000.

j. Monitoring/Re-evaluation

A monitoring program will be developed to assess the success of the implementation measures from task i. The monitoring program will be completed by the end of February 2000.

k. Staff Workshops

The following public workshops will be conducted:

- Stakeholder workshop July 1999
- Stakeholder workshop September 1999
- Stakeholder workshop November 1999

- Public Workshop April 2000

l. Notice of Filing/Hearing

Public notice for the Regional Board Hearing will be made at least 45 days prior to the meeting date. A copy of the Draft TMDL will be sent to State Board for peer review by the end of May 2000.

m. Regional Board Hearing

Consideration of the TMDL is scheduled for the August 2000 Regional Board Meeting.

5. Budget/Products/Completion Dates

The trash TMDL for the Los Angeles River and Ballona Creek are being done concurrently, allowing for a substantial amount of cost sharing between the two TMDLs.

Task	Staff Resources (\$)	Contracts (\$)	Products	Completion Dates
a			Problem Statement Write-up	June 1999
b	\$6,000		Numeric Targets	August 1999
c	\$6,000		Source Analysis	September 1999
d	\$7,000		Allocations	November 1999
e	\$6,000		Linkage Analysis	November 1999
f	\$6,000		Margin of Safety	November 1999
g	\$8,000		Technical TMDL report	March 2000
h	\$7,000		Stakeholder Participation	
i			Implementation Plan	February 2000
j			Monitoring/Re-evaluation	February 2000
k	\$17,000		Staff Workshops	
l			Notice of Filing	June 2000
m			Regional Board Hearing	August 2000
	\$63,000	Total		

Project: Santa Monica Beach Zone Pathogen TMDL

1. Description

The beaches of Santa Monica Bay are some of the most heavily used beaches in the world. High coliform counts are impacting these recreational beneficial uses. The following tasks are needed to continue work on the Pathogen TMDL for Santa Monica Beaches: oversee data collection and data assessment efforts, quantify sources, develop load allocations, develop implementation plan, prepare draft final document, and conduct public workshops.

2. Hydrologic Unit Description:

3. Purpose/Objectives

Prepare for future adoption of TMDL.

4. Tasks

a. Problem Statement

The beaches of Santa Monica Bay are some of the most heavily used beaches in the world. High coliform counts are impacting these recreational beneficial uses. The problem statement is scheduled for completion by the end of August 1999.

b. Numeric Target

The numeric targets for this TMDL will be based on the County Health Department's criteria for beach closures. The numeric targets for this TMDL are scheduled for completion by the end of October 1999.

c. Source Analysis

Source Analysis will be conducted by reviewing and analyzing the following sources of data:

- County Health monitoring data
- Bight project data
- Special Studies being conducted by stakeholders

There are a number of beaches covered by this TMDL and there is a large amount of data that will need to be analyzed. Source Analysis is scheduled for completion by the end of January 2000.

d. Allocations

The load allocations will be based on concentration, as mass does not make sense due to the nature of contaminant. The load allocations will be developed in coordination with stakeholders. The load allocations will be completed by the end of April 2000.

e. Linkage Analysis

The linkage analysis will be completed by evaluating different load allocations. Stakeholder input will also be needed to refine assumptions. The linkage analysis will be completed by the end of May 2000.

f. Margin of Safety

The margin of safety will be based on an evaluation of the level of uncertainty calculated in the load allocation and linkage analysis. The margin of safety will be developed by the end of May 2000.

g. Technical TMDL Report

Documentation of tasks a-f will be compiled and submitted to US EPA and the State Board by the end of July 2000. The available funds will only partially complete this task.

h. Stakeholder Participation

Stakeholder participation is an ongoing part of the process throughout the development of the TMDL. Staff will solicit participation for tasks c,d,e,i,j,m.

i. Implementation Plan

In conjunction with the stakeholders, an implementation plan and a strategy to develop implementation measures will be developed using the load allocations identified in task d that will meet the numeric targets from b. The implementation plan will be completed by the end of August 2000. The available funds will only partially complete this task.

j. Monitoring/Re-evaluation

A monitoring program will be developed to assess the success of the implementation measures from task i. The monitoring program will be completed by the end of August 2000. The available funds will only partially complete this task.

k. Staff Workshops

The following public workshops will be conducted:

- Stakeholder workshop January 2000
- Stakeholder workshop April 2000

Further workshops will be needed to complete this TMDL in FY 2000-01

l. Notice of Filing/Hearing

Work on this task will be in FY 2000-01.

m. Regional Board Hearing

Work on this task will be in FY 2000-01.

5. Budget/Products/Completion Dates

Task	Staff Resources (\$)	Contracts (\$)	Products	Completion Dates
a	\$6,000		Problem Statement Write-up	August 1999
b	\$9,000		Numeric Targets	October 1999
c	\$17,000		Source Analysis	January 2000
d	\$17,000		Allocations	April 2000
e	\$15,000		Linkage Analysis	May 2000
f	\$7,000		Margin of Safety	May 2000
g	\$16,000		Technical TMDL report	July 2000
h	\$15,000		Stakeholder Participation	
i			Implementation Plan	August 2000
j			Monitoring/Re-evaluation	August 2000
k	\$10,000		Staff Workshops	
l			Notice of Filing	October 2000
m			Regional Board Hearing	January 2001

	\$97,000	Total
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Project: Los Angeles River Coliform TMDL

1. Description

The Los Angeles River Watershed is one of the most diverse watersheds in terms of land use patterns; the river travels 55 miles from its point of origin to the Pacific Ocean between the City of Long Beach and the Port of Long Beach. Approximately 324 square miles of the watershed are covered by forest or open space land including the area near the headwaters, which originate in the Santa Monica, Santa Susana, and San Gabriel Mountains. The rest of the watershed is highly developed. Due in part to this development, the River is impacted by high levels of coliform. The funding for this project would begin work on a Coliform TMDL for Los Angeles River. Tasks would include overseeing data collection and data assessment efforts, quantifying sources, developing load allocations, beginning development of an implementation plan and conducting public workshops.

2. Hydrologic Unit Description:

3. Purpose/Objectives

Prepare for future adoption of TMDL.

4. Tasks

a. Problem Statement

The watershed is highly developed. Due in part to this development, the River is impacted by high levels of coliform. The problem statement is scheduled for completion by the end of September 1999.

b. Numeric Target

The numeric target for this TMDL will be based on the County Health Department's criteria for beach closures. The numeric targets for this TMDL are scheduled for completion by the end of November 1999.

c. Source Analysis

Source Analysis will be conducted by reviewing and analyzing the following sources of data:

- Los Angeles City and County monitoring data
- Regional Board water quality assessment database
- Special Studies being conducted by stakeholders

Source Analysis is scheduled for completion by the end of February 2000.

d. Allocations

The load allocations will be based on concentration, as mass does not make sense due to the

nature of contaminant. The load allocations will be developed in coordination with stakeholders. The load allocations will be completed by the end of May 2000.

e. Linkage Analysis

The linkage analysis will be completed by evaluating different load allocations. Stakeholder input will also be needed to refine assumptions. The linkage analysis will be completed by the end of June 2000.

f. Margin of Safety

The margin of safety will be based on an evaluation of the level of uncertainty calculated in the load allocation and linkage analysis. The margin of safety will be developed by the end of June 2000.

g. Technical TMDL Report

Documentation of tasks a-f will be compiled and submitted to US EPA and the State Board by the end of August 2000. The available funds will only partially complete this task.

h. Stakeholder Participation

Stakeholder participation is an ongoing part of the process throughout the development of the TMDL. Staff will solicit participation for tasks c,d,e,i,j,m.

i. Implementation Plan

In conjunction with the stakeholders, an implementation plan will be developed using the load allocations identified in task d that will meet the numeric targets from b. The implementation plan will be completed by the end of September 2000. The available funds will only partially complete this task.

j. Monitoring/Re-evaluation

A monitoring program will be developed to assess the success of the implementation measures from task i. The monitoring program will be completed by the end of September 2000. The available funds will only partially complete this task.

k. Staff Workshops

The following public workshops will be conducted:

- Stakeholder workshop February 2000
- Stakeholder workshop May 2000

Further workshops will be needed to complete this TMDL in FY 2000-01

l. Notice of Filing/Hearing

Work on this task will be in FY 2000-01.

m. Regional Board Hearing

Work on this task will be in FY 2000-01.

5. Budget/Products/Completion Dates

Task	Staff Resources (\$)	Contracts (\$)	Products	Completion Dates
a	\$6,000		Problem Statement Write-up	September 1999
b	\$9,000		Numeric Targets	November 1999
c	\$17,000		Source Analysis	February 2000
d	\$17,000		Allocations	May 2000
e	\$15,000		Linkage Analysis	June 2000
f	\$7,000		Margin of Safety	June 2000
g	\$16,000		Technical TMDL report	August 2000
h	\$15,000		Stakeholder Participation	
i			Implementation Plan	September 2000
j			Monitoring/Re-evaluation	September 2000
k	\$10,000		Staff Workshops	
l			Notice of Filing	November 2000
m			Regional Board Hearing	February 2001
	\$97,000	Total		

DIVISION OF WATER QUALITY

See Section Two (Division of Water Quality) for this workplan. The Division of Water Quality’s work is funded under both Sections 104 and 106.

SECTION THREE-A: COMPLETION OF CARRYOVER SECTION 104(B)(3) TMDL ACTIVITIES

This Section contains workplans for completion of activities begun in FY 1998-99 but not completed for various reasons. Funding for these activities will be from the FY 1997-98 and FY 1998-99 Section 104(B)(3) grants which were extended by U.S. EPA with no change in amount until June 30, 2000. The workplans and funding have been revised by the RWQCBs to include only uncompleted activities. Regional Boards will continue to charge PCA Codes 117-01 and 117-02, as appropriate, for work performed under this Section.

NORTH COAST REGIONAL BOARD (1)

Continuation of TMDL Development and Adoption Process for North Coast Rivers

1. OBJECTIVE OF THIS WORKPLAN

The watersheds on the Mendocino Coast are targeted for TMDL development activities in FY 1999-00. Specifically, staff will begin data gathering for the Mattole River watershed and develop technical TMDLs in the Navarro and Gualala River watersheds. Additional assistance and coordination with U.S. EPA is anticipated for the Ten Mile River.

Implementation plans will not be a part of this workplan and their development is contingent on additional resources being made available.

2. TASKS, MILESTONES AND COSTS

A. Coordination and Assistance to U.S. EPA

This task includes coordination on TMDL approaches and on individual TMDL progress, as well as assistance to U.S. EPA for its lead TMDLs on the Ten Mile River. This task is ongoing and only costs associated with this grant are shown. Other funds are being used for these tasks in addition to this grant.

Ten Mile River
Coordination and input

MILESTONES

Coordination	Ongoing
Assistance	Ongoing

<u>COST</u>	\$25,000
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B. Navarro and Gualala Rivers Outreach, Initial Data Gathering, and Preliminary TMDL Development

Staff will perform initial outreach to gather information to be used in watershed assessment and developing TMDLs for these two watersheds. The task will concentrate on TMDL development in the Navarro watershed as the bulk of the assessment will occur under the Mendocino Coast Assessment. Preliminary TMDLs will be developed during FY 1999-00.

MILESTONES

Gualala Data Gathering	Jun 1999
Navarro Preliminary TMDL Assessment	Jun 1999
Navarro Preliminary TMDL	Mar 2000
Gualala Preliminary TMDL	Jun 2000

<u>COST</u>	\$47,958
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C. Mattole River Outreach and Initial Data Gathering

Initial outreach to gather information to be used in watershed assessment and in developing a TMDL.

MILESTONES

Data Gathering	Apr 2000
Preliminary Data Assessment	Jun 2000

<u>COST</u>	\$28,948
<u>TOTAL COST</u>	\$101,906

NOTE:

FY 1999-00 funds identified for the Mendocino Coast Watershed Assessment and the Navarro, Gualala, and Mattole Rivers efforts will support existing staff and the IPA contract with U.S. EPA.

LOS ANGELES REGIONAL BOARD (4)

This section of the workplan describes TMDL-related work begun in FY 1998-99 to be completed in FY 1999-00 using unexpended FY 1998-99 Section 104(b)(3) and possibly Section 106 grant funds. The following describes the major program areas, tasks, and costs:

Watershed assessment – San Gabriel River

The San Gabriel River is our targeted watershed for FY 1999-00. As part of our focus on the San Gabriel River, the Regional Board will correlate and assess existing data, including ambient water quality data collected by the Regional Board, receiving water samples collected by dischargers, and volunteer monitoring data collected by non-profit groups. The assessment will be used to revise the receiving water monitoring requirements for dischargers and to produce a comprehensive data assessment report.

Products

Product description	Completion Date
Integrated watershed monitoring program	February 2000
Data assessment report	June 2000
Cost	\$40,000

Santa Clara River Chloride

The Santa Clara River Chloride issue was started in FY 1998-99 as a TMDL. After investigation of the problem, it was determined that the appropriate course of action would be a revision to the water quality objective. This project will finalize the Basin Plan Amendment needed to complete the water quality objective revision.

Product description	Completion Date
Public hearing	September 1999
Basin Plan Amendment	October 1999

Regional Board Hearing	December 1999
Cost	\$30,000

Public Outreach and Education

Due to the large number of TMDLs, over 700 in Region 4, and the short time frame imposed by the Consent Decree, Region 4 must complete all of its TMDLs within 13 years, necessitating the Region to bring its stakeholders up to speed in a short period of time. To address this need Region 4 will be hosting two stakeholder conferences in FY 1999-00. This funding will be used to cover staff time preparing for the two conferences. The other expenses associated with the events are being covered by stakeholders.

Product description	Completion Date
Achieving Success in the TMDL Program	September 1999
Litter Management TMDLs	December 1999
Cost	\$20,000

Increased Ambient Monitoring

The lack of support for ambient water quality monitoring over the past few years has limited Region 4's ability to monitor all of its receiving waters on a regular basis. This funding will be used to augment the lab contract to allow for monitoring of receiving waters as a preparation for TMDL development. Monitoring is planned on the Los Angeles River, the San Gabriel River, and Malibu Creek in the fall and/or spring.

Product description	Completion Date
Completed Sampling events	May 2000
Sampling Report	June 2000
Cost	\$27,000

CENTRAL VALLEY REGIONAL BOARD (5)

This section of the workplan describes TMDL-related work begun in FY 1998-99 to be completed in FY 1999-00 using unexpended FY 1998-99 Section 104(b)(3) grant funds.

TMDL Development Strategy for Mercury in the Delta

The Sacramento-San Joaquin Delta has been listed under Section 303(d) of the Clean Water Act as impaired due to mercury. The listing is based on the 1973 California Department of Health Services advisory to pregnant women and children not to consume striped bass taken from the Delta estuary

due to high mercury levels. There is a need to better define the sources of mercury to the Delta, understand mercury cycling in the system, and determine how to reduce levels of bioavailable mercury in the system. This is the initial phase of the mercury TMDL. Further development is dependent on obtaining information on the sources, transport, and transformation of mercury. The first step will be to develop a TMDL Report that contains all the TMDL elements required by USEPA.

Studies have shown that Cache Creek is a major contributor of mercury loads to the Delta during storm events. The RWQCB is currently working with the Cache Creek general stakeholders group, a steering committee for the stakeholders group and a mercury technical workgroup, which was formed to better coordinate mercury related activities in the watershed. Recently, the workgroup members agreed to participate in a new mercury group with an enlarged geographic scope that would include the Estuary.

1. OBJECTIVE OF THIS WORKPLAN

During FY 1999-2000, a regional mercury assessment group will be formed to address the mercury issue in the Delta. This group will likely include members of the Cache Creek mercury technical workgroup and the CALFED metals subgroup. The objective is to use the regional mercury assessment group to provide help in developing the mercury TMDL or a long term strategy for the Delta. Regional Board staff will help organize this new regional group and will solicit participation from interested stakeholders from the Bay area and the eastern tributaries of the Sacramento, River. This new group will comment on the strategy for developing the Cache Creek mercury TMDL Report and other mercury TMDL reports in this Region. The Sacramento River Watershed program will provide \$30,000 to facilitate the regional mercury workgroup. Regional Board staff will work with the facilitator to get the workplan and contract in place. They will also provide technical assistance to the facilitator and help coordinate the meetings.

The goal of the watershed participation is to get public input to the strategy for developing mercury TMDL reports. A draft Cache Creek TMDL Report development strategy has already been presented to the Cache Creek mercury workgroup. It will be finalized by December 1999.

2. TASKS

A. Public Participation \$25,000

Work with watershed stakeholder group to get public input on Cache Creek strategy for development of a TMDL Report.

1. Coordinate and participate in general stakeholder and steering committee meetings.
2. Participate in Technical Advisory Committee for 205(j) grant project for Putah and Cache Creeks.

B. TMDL Development Strategy **\$40,000**

Work with mercury technical groups to get technical review of Cache Creek strategy for development of a TMDL report and the CALFED mercury grant.

1. Help coordinate and participate in Cache Creek and new regional mercury technical workgroups.
2. Finalize Cache Creek strategy for development of a TMDL report.
3. Work with partners on CALFED mercury grant.

3. MILESTONES

Task A.	Meeting agendas and minutes quarterly 205(j) project reports	every six weeks quarterly
Task B.	Meeting agendas and minutes Cache Creek TMDL report development strategy.	every six weeks Dec. 1999

TOTAL COST **\$65,000**

LAHONTAN REGIONAL BOARD (6)

Watershed Management Implementation, Monitoring and Assessment, and TMDL Development in Five Target Watersheds

This workplan focusses on tasks to forward activities in five of the Region's targetted watersheds: Lower Truckee River, Upper Truckee River, Carson River, Owens River, and Mojave River. The tasks are in three categories: watershed management implementation, monitoring and assessment, and development of TMDLs. These tasks have been specified as high priority in the Region's WMI Chapter.

1. OBJECTIVE OF THIS WORKPLAN

Watershed Management Implementation

The tasks in this category of activity include public outreach and education, stakeholder group development or participation in existing stakeholder groups, implementation of priority tasks identified in the Region's WMI Chapter, coordination with the Region's Watershed Coordinator to complete WMI Chapter updates and revisions, and relevant tasks. The tasks

described herein will be completed by and under the direction of the Stewards for each of the five targetted watersheds and will not duplicate activities of the Region's Watershed Coordinator. Outputs will include development of and participation in stakeholder groups, implementation of priority WMI tasks, and training. Funds will be used mainly for Regional Board staff.

Monitoring and Assessment and TMDL Development

The tasks in these categories include evaluation of existing monitoring data and monitoring to collect additional data, as well as QA/QC tasks, and also those tasks remaining to complete a Phase I TMDL for the Lower Truckee River and to provide training in citizen biological monitoring. Additional data collected will be used to assess current water quality standards, to establish baseline information on which to evaluate potential impacts of future activities, and to act as a screening tool to refine the scope of future TMDL work. A portion of new data collected will be the result of biomonitoring, which will not duplicate other biomonitoring completed in the targetted watersheds, such as in the Owens and Carson watersheds. Outputs will include information needed to evaluate current water quality standards, baseline biological information with which to evaluate the potential impacts of future activities in the Owens, Carson, and Upper Truckee watersheds, biological parameters to refine the scope of future TMDL work, and a training session in biological monitoring for citizen groups. Funds will be used for contracts as specified below.

2. TASKS

- b. **Begin monitoring tasks** in the targetted watersheds as follows. These activities will be continued and completed under succeeding grants in succeeding years. Note that all funds will be used for contracts.

Truckee River - provide training for volunteer biomonitoring, purchase equipment for biomonitoring and complete the final tasks for a Phase I TMDL

Upper Truckee River - establish baseline assemblages of instream fauna for Trout Creek and a reach of the Upper Truckee River headwaters, evaluate existing monitoring data, and prepare summary reports on all three activities (under succeeding grant).

Carson River - evaluate existing monitoring data and prepare a summary report, perform biomonitoring at selected sites, use biomonitoring results to assess metals and mining impacts and to refine the scope of future TMDL development (under succeeding grant).

Owens River - perform biomonitoring at selected sites, use biomonitoring results to refine the scope of future TMDL development and prepare a summary report of results (under succeeding grant).

MILESTONES

Summary reports on each watershed	Nov. 1999.
Summary report on existing data for Carson River and Upper Truckee River .	May 2000
Draft sections of Phase I TMDL for Truckee River	Sept. 2000
Training in volunteer citizen biomonitoring	April 2000.

COST \$36,000
(Note: All cost are contract costs)

TOTAL COST **\$36,000**

COLORADO RIVER REGIONAL BOARD (7)

Continuation of TMDL Development For: Silt Load Reduction In Alamo River; Bacteria In New River at the International Boundary.

1. OBJECTIVE OF THIS WORKPLAN

Agricultural runoff and subsurface drainage from the Imperial Valley along with untreated and partially treated wastewater originating in Mexicali are a major nonpoint source (*NPS*) of water pollution in Region 7. Four of the six impaired waterbodies listed in the 1998 Clean Water Act Section 303(d) list for Region 7 are located in the Imperial Valley portion of the Salton Sea Transboundary Basin Priority Watershed. They are New River, Alamo River, Imperial Valley agricultural drains, and Salton Sea. Region 7 has identified the TMDL commitments mentioned above for completion within the next two years. Following U.S. EPA and State NPS guidance, an iterative phased approach will be employed, along with application of models and professional judgment to set a reasonable TMDL target for silt reduction in the Alamo River. Following assessment and evaluation of existing monitoring data, a bacteria TMDL will be set for the New River at the International Boundary. Staff activities for FY 1999-00 will focus on completion of the required TMDL elements within the task schedule completion dates. These required elements include:

- a. Drafting problem statements for each TMDL
- b. Public participation and formation of Technical Advisory Committees (TACs)
- c. Evaluation and assessment of water quality data from all sources
- d. Determination of assimilative capacities for identified pollutants/stressors for each targeted waterbody
- e. Determination of load allocations
- f. Setting TMDL for each identified pollutant/stressor for the identified waterbodies
- g. Developing implementation plan with stakeholder input.

In Region 7, TMDL efforts coincide with ongoing work to control NPS pollution from irrigated agriculture. Imperial Irrigation District (IID) is the primary stakeholder and responsible party for this pollution. IID has been working in a cooperative partnership with the Regional Board via IID's Drain Water Quality Improvement Plan (DWQIP). This program was established in 1994 as a NPS Tier 2 program to reduce silt and concurrent pesticide pollution from agricultural runoff. This program will be revised and intensified to focus on development and implementation of a silt TMDL within the task schedule. Emphasis will be on silt reduction BMP demonstration projects including monitoring and assessment components. BMPs demonstrating measurable reduction of silt loading will be incorporated into revisions of the TMDL implementation plan. Priority TMDL tasks and overall TMDL development strategy are identified in Region 7's WMI Chapter.

2. TASKS

Subject to the availability of U.S. EPA funding or of funding from other sources for FY 1999-00, The Colorado RWQCB will perform the following tasks in FY 1999-00:

a. Public Participation and Involvement in TMDL Development

Regional Board staff will participate in the following stakeholder groups: Salton Sea Authority Board meetings, TAC meetings, and SSA Science Subcommittee; IID Drain Water Quality Improvement Plan TAC meetings; Citizens Task Force on New River involving Section 319 pilot projects for constructed wetlands to treat polluted agricultural drainage water; Silt TMDL TAC; and New River TMDL TAC (existing bi-national TAC will serve as TMDL TAC).

Staff will present TMDL information and progress reports to the Regional Board, the IID Board, and other stakeholder groups as requested. Staff will provide technical assistance and regulatory guidance to IID in seeking their input into TMDL development and will participate with IID in public outreach and education programs.

Staff will also assist IID with technical issues and with evaluation of BMP pilot projects and assist in proposal submittal for BMP implementation demonstration projects and watershed modeling/planning projects from IID and others.

MILESTONES

Quarterly progress reports Oct. 1999, Jan. 2000, April 2000, June 2000

COST **\$25,000**

b. Monitoring and Assessment of all existing water quality data

Consolidation, assessment, and evaluation of monitoring data from all available sources for targeted waterbodies. Utilize available water quality models with professional judgment for predictive analysis of targeted pollutants/stressors. Revise existing DWQIP with IID including monitoring to focus on silt TMDL development. Data gap monitoring by Regional Board. Prepare progress reports.

MILESTONES

Prepare progress report(s) Oct. 1999, Jan. 2000, April 2000, June 2000

COST \$35,000

c. Evaluation of Data and TMDL Development

Staff will estimate assimilative capacity for silt in the Alamo River; estimate total pollution from all sources; and develop TMDLs for silt for Alamo River. Follow same steps to set numeric TMDL for bacteria for New River at International Boundary. Staff will prepare progress reports.

MILESTONES

Prepare progress reports Oct. 1999, Jan. 2000, April 2000, June 2000

COST \$40,000

d. Draft TMDL Implementation Plan

Using stakeholder input regarding effective BMPs, staff will draft an implementation plan for silt reduction in Imperial Valley waterways. In cooperation with IBWC/USEPA and Mexico, a new water quality minute treaty must be negotiated to implement TMDLs at the International Boundary.

MILESTONES

Draft TMDL Implementation Plan Jun. 1999

COST Not covered by this grant

TOTAL COST \$100,000

SAN DIEGO REGIONAL BOARD (9)

TMDL for Chollas Creek and San Diego Bay near the Mouth of Chollas Creek

SPECIAL NOTE TO THIS SECOND AMENDMENT: Region 9 had no carryover Section 104 funding from FY 1998-99. Therefore, as any further work on Chollas Creek and San Diego Bay in FY 1999-00 will not be funded by U.S. EPA, the tasks associated with this project are being deleted from the second amended workplan.

TMDL for Rainbow Creek

SPECIAL NOTE TO THIS SECOND AMENDMENT: Region 9 had no carryover Section 104 funding from FY 1998-99. Therefore, as any further work on Rainbow Creek in FY 1999-00 will not be funded by U.S. EPA, the tasks associated with this project are being deleted from the second amended workplan.

DIVISION OF WATER QUALITY

WMI Workgroup Facilitator

The SWRCB will contract with the Department of Personnel Administration’s Division of Training and Continuous Improvement for a facilitator who will attend the meetings of the WMI Workgroup during FY 1999-00 to improve communication and coordination.

COST **\$ 13,098 (DPA Contract)**

**SECTION FOUR: COMPLETION OF SPECIAL SECTION 104(B)(3)
PROJECTS BEGUN IN FY 1998-99**

A. SANITARY SEWER OVERFLOW DATABASE AND INVENTORY

The extent and severity of pollution caused by Sanitary Sewer Overflows (SSOs) in California is currently unknown because of the lack of an organized procedure and database for gathering and evaluating data and reporting on the number, size, location, and impact of SSOs. The result is that there has been no way to develop a coherent statewide strategy for prioritizing permitting, compliance, and enforcement efforts to reduce the SSO problem, which is believed anecdotally to be potentially serious.

Work on the project began in FY 1998-99, but could not be completed due to the inability to reach consensus with the Regional Boards on: (a) the need for the database, (b) the functionality (design) of the database, and (c) how the database would operate until it could be integrated into SWIM. The workplan for FY 1999-00 continues activities begun in FY 1998-99 and proposes to complete the project by resolving the above issues. This work is to be funded by carryover unexpended FY 1998-99 Section 104(b)(3) funds.

1. OBJECTIVE OF THIS WORKPLAN

The objectives of the workplan are:

- a. Determine the location, timing, magnitude, responsible party, duration, impact, and remedial actions taken for SSOs occurring in California. Be able to report on these elements whenever needed with statewide consistency in data reporting.
- b. Develop a statewide strategy to prioritize permitting, compliance, and enforcement efforts by the RWQCBs as an element of the WMI.
- c. Use data in the development of improved NPDES permits for agencies experiencing chronic SSO problems.

2. TASKS

a. **Develop Database Structure**

Determine data elements needed to document overflows. This phase would be coordinated with the Los Angeles and San Diego Regional Boards, as these offices currently maintain tracking systems for such overflows in their regions. This information will then be provided to the State Board SWIM development staff to be incorporated into that system as a part of the Complaint Module which is being developed in FY 1999-00.

b. **Resolve Any Issues of Converting Current Data**

Data currently being collected by Los Angeles and San Diego Regional Boards will be converted into the new SWIM module and any problems encountered will resolved.

c. **Coordinate with U.S. EPA**

Coordinate with U.S. EPA's PCS support staff and other program staff to ensure that the data captured will be compatible with PCS and with U.S. EPA's information objectives.

3. MILESTONES AND COST

<u>Task</u>	<u>Projected Cost</u>	<u>Expected Completion Date</u>
a	\$40,000	January 2000
b	\$15,000	February 2000
c	\$15,000	May 2000

NOTE: State match funds for this project were expended in FY 1998-99.

B. CONTINUATION OF LEVIATHAN MINE BIOREACTORS FOR TREATMENT OF ACID MINE DRAINAGE

Leviathan Mine is an inactive sulfur mine owned by the SWRCB. The mine is located in Alpine County, approximately five miles east of Markleeville. On the average, about 50 million gallons per year of acid mine drainage (AMD) discharge from this mine into Leviathan Creek, then to Bryant Creek, which discharges in Nevada into the East Fork Carson River. AMD from Leviathan Mine can be characterized as a dilute sulfuric acid solution containing dissolved heavy metals including nickel, aluminum, copper, arsenic, and iron. Open pit mining operations during the 1950s and 1960s resulted in exposure of sulfidic materials to air and water and thus to generation of AMD.

The SWRCB completed a pollution abatement system for the mine in 1985 which captures surface runoff and routes it around mining spoils and disturbed areas, reducing the amount of AMD generated. Additionally, the system captures and evaporates AMD from the underground mine workings in a series of lined ponds. Pond surface area has been subsequently reduced resulting in incomplete evaporation of AMD. This has resulted in pond overflows and discharge of AMD. The RWQCB is currently implementing and assessing means for eliminating pond overflows.

In addition to the discharge of AMD from pond overflows, about 30 million gallons per year of AMD continues to discharge from two seeps on the mine property, known as the Aspen Seep and the Channel Under Drain. This has been exacerbated by recent seismic activity in the area.

1. OBJECTIVE OF THIS WORKPLAN

This project will provide a means to treat AMD from the Aspen Seep and the Channel Under Drain. Treatment will be provided by passing the AMD through an organic rich pond (bioreactor) where sulfate will be reduced to sulfite and two favorable chemical reactions will occur. The first will consume acidity, raising the pH to near neutral. The second will occur as sulfides react with toxic metals producing insoluble metal sulfides. The objective is to produce an effluent from the bioreactor with near neutral PH and substantially reduced heavy metals concentrations. Grant funds will be used to enhance an existing bioreactor by installing (1) synthetic liners to reduce infiltration, (2) larger diameter pipes to prevent clogging and improve flow distribution, (3) flow control devices to improve overall hydraulic control of the system. The Aspen Seep bioreactor will be enhanced first, followed by careful monitoring using funds from other sources. This will provide information for final design of the Channel Under Drain bioreactor which will be designed to treat up to 70 gallons per minute. Grant funds will be used for construction on the Aspen Seep and to hire a "prime consultant" to perform several tasks.

2. TASKS

The grant tasks will cover activities through June 30, 2000. The overall workplan for this project will *continue under future grants*.

Task CUD1 Geotechnical assessment of project area to evaluate site stability

MILESTONES

August 31, 1999 Workplan for collection of field data due
August 31, 1999 Complete field work
August 31, 1999 Geotechnical report due

COST \$10,000

Task CUD2 Land survey of project area

MILESTONES

August 31, 1999 Complete field survey
August 31, 1999 Prepare site base map

COST \$ 5,000

Task CUD3 Develop conceptual design for bioreactor

MILESTONES

Feb. 28, 2000 Submit preliminary design report outlining project goals,
constraints, and major design considerations
Feb. 28, 2000 Respond to comments by project sponsors

COST \$ 5,000

Task CUD4 Site civil engineering, final project design, develop construction drawings and specifications

MILESTONES

Mar. 31, 2000 Submit construction drawings and specifications

COST \$35,000

Task CUD5 Develop appropriate environmental documents to comply with CEQA

MILESTONES

Jan. 31, 2000 Make determination of required CEQA document
 April 30, 2000 Prepare, circulate, and complete required CEQA document

COST \$ 5,000

Task CUD6 Contract advertisement and bid solicitation

MILESTONES

June 15, 2001 Conduct pre-bid meeting

COST \$ 5,000

TOTAL COST FOR FY 1999-00 \$60,000

PRIMARY TASK NUMBER	TASK DESCRIPTION	TASK MILESTONES	COMPLETION DATE	BUDGET ALLOTMENT
AS1	Construction activities to enhance performance of the Aspen Seep bioreactors.	1. Complete grading for liner installation. 2. Complete construction of AMD distribution system, and all appurtenances.	6/30/99 6/30/99	
CUD1	Geotechnical assessment of project area to evaluate site stability.	1. Prepare and submit workplan for the collection of field data. 2. Complete field work. 3. Prepare and submit geotechnical report.	8/31/99 8/31/99 8/31/99	\$10,000 _{F2}
CUD2	Land survey of the project area.	1. Complete field survey work. 2. Prepare and submit site base map.	8/31/99 8/31/99	\$5,000 _{F2}
CUD3	Development of conceptual design.	1. Prepare and submit preliminary design report that outlines project goals, constraints, and major design considerations. 2. Respond to comments from project sponsors.	2/28/00 2/28/00	\$5,000 _{F2}
CUD4	Civil site engineering, project design, and development of construction drawings and specifications.	1. Prepare and submit 50% construction drawings and specifications. 2. Prepare and submit 75% construction drawings and specifications. 3. Prepare and submit 90% construction drawings and specifications. 4. Prepare and submit 100% construction drawings and specifications.	3/31/00	\$35,000 _{F2}

PRIMARY TASK NUMBER	TASK DESCRIPTION	TASK MILESTONES	COMPLETION DATE	BUDGET ALLOTMENT
CUD5	Development of appropriate environmental document to comply with the California Environmental Quality Act (CEQA).	1. Make determination regarding the required CEQA document. 2. Prepare, circulate, and complete required environmental document.	1/31/00 4/30/00	\$5,000 _{F2}
CUD6	Advertisement, bid solicitation, and contract award for project construction.	1. Conduct pre-bid meeting. 2. Conduct bid opening meeting. 3. Award construction contract.	6/15/01 7/15/01 7/30/01	\$5,000 _{F3 AND F4}
CUD7	Construction management.	1. Prepare and submit weekly construction progress reports.	7/30-10/15/01	\$15,000 _{F4}
CUD8	Project Construction	1. Complete construction staking. 2. Complete necessary earthwork. 3. Install synthetic liners. 4. Divert AMD to bioreactors.	8/15/01 8/30/01 9/15/01 9/30/01	\$44,000 _{F4}
CUD9	Development of As-Built plans.	1. Development of "As Built" plans.	10/30/01	\$3,000 _{F4}
CUD10	Development of operations and maintenance plan.	1. Development of draft O&M manual. 2. Development of final O&M manual.	6/15/02 6/30/02	\$3,000 _{F4}

F1 FISCAL YEAR 98-99

F2 FISCAL YEAR 99-00

F3 FISCAL YEAR 00-01

F4 FISCAL YEAR 01-02

TABLE ONE
 FY 1999-00 COMBINED SECTION 104/106 WORKPLAN
 AMENDED NPDES PERMIT REISSUANCE COMMITMENT

REGION ONE

PERMIT NUMBER	AGENCY NAME	BACKLOG	QUARTER			
			1	2	3	4
<u>MAJORS</u>						
CA0022756	City of Crescent City WWTP	WMI				x
CA0022721	City of Ferndale WWTP	WMI				x
CA0022730	City of Fortuna WWTP	WMI				x
CA0022748	City of Rio Dell WWTP	WMI				x
CA0022888	City of Ukiah WWTP	WMI			x	
CA0023078	Fort Bragg MID #1 WWTP	WMI				x
CA0005894	Louisiana Pacific-Samoa Pulpmill	WMI				x
CA0005622	PG&E-Humboldt Bay PP	WMI			x	
<u>MINORS</u>						
CA0006696	CDFG Trinity River hatchery	WMI				x
CA0006670	CDFG Mad River hatchery	WMI				x
CA0023272	City of Tulelake WWTP	WMI				x
CA0023060	City of Willits WWTP	WMI				?*
CA0006700	College of the Redwoods WWTP	WMI				x
CA0024716	Contel of California	WMI				?*
CA0023574	Covelo CSD WWTP	WMI				?*
CA0024945	Eel River Sawmills-Mozzetti WWDS	WMI				?*
	WMI				x	
CA0005304	Georgia Pacific, Fort Bragg	WMI				?*
CA0024171	Harwood Products, Branscomb Mill	WMI				?*
CA0005886	Louisiana Pacific, Fort Bragg	WMI				x
CA0022870	Mendocino City CSD	Yes			x	
CAS002499	Mission Trail Oil Company, Rotten Robbie	WMI				?*
CA0024694	Optical Coating Laboratory	WMI	x			
CA0006017	Pacific Lumber Company-Scotia	WMI	x			
CA0022781	Redway CSD WWTP	WMI				x

CA0006955 Fulton Processors

CA0024821	Redwood Bulk Oil Plant	Yes		x
CA0024058	Russian River CSD	Yes		x
CA0023027	Shelter Cove WWTP	WMI		x
CA0024872	Southern Pacific Transportation	Yes	x	
CA0024881	Southland Corporation	WMI		?*
CA0023655	Vacu Dry Company	WMI		x
CA0024333	UC Davis Bodega Marine Laboratory	WMI		x

Source: Input on December 3, 1999 from Region 1.

NOTE: ?* = Region 1 stated on December 3, 1999 that they do not anticipate being able to reissue these permits in FY 1999-00.

TABLE ONE
 FY 1999-00 COMBINED SECTION 104/106 WORKPLAN
 AMENDED NPDES PERMIT REISSUANCE COMMITMENT

REGION TWO

PERMIT NUMBER	AGENCY NAME	BACKLOG?	QUARTER			
			1	2	3	4
<u>MAJORS</u>						
CA0005240	California and Hawaiian Sugar	WMI				x
CA0037648	Central Contra Costa CSD	WMI				x
CA0005134	Chevron	Yes	x			
CA0038091	City of Benicia	Yes			x	
CA0038008	City of Livermore WWTP	Yes				x
CA0037532	City of Millbrae WWTP	Yes			x	
CA0037494	City of Pacifica	Rsc	x			
CA0037796	City of Pinole WWTP	WMI	x			
CA0037613	Dublin-San Ramon SD	Yes				x
CA0038547	Delta Diablo SD	Yes		x		
CA0037702	East Bay MUD Service District #1	WMI	x			
CA0037869	EBDA Joint Outfall					
	City of Hayward WWTP, Oro-Loma SD, Union SD, City of San Leandro WWTP	Yes				x
CA0037770	Mountain View SD	Yes	x			
CA0037575	Napa SD WWTP	Yes			x	
CA0037737	North San Mateo County SD	WMI				
CA0028070	San Francisco Int'l Airport Industrial WTP	Yes			x	
CA0038067	Sausalito-Marín City SD	WMI				x
CA0037711	Sewerage Agency of South Marin	WMI				x
CA0038598	Sewer Authority Mid-Coastside	WMI			x	
CA0038369	South Bayside SA	Yes			x	
CA0038130	South San Francisco-San Bruno WQCP	Yes			x	
CA0004961	Tosco - Avon Refinery	Yes	x			
CA0005053	Union Oil Refinery	WMI	x			
CA0005002	US Steel Posco	Yes			x	
CA0037699	Vallejo SFCD	Yes	x			

MINORS

Region 2 stated on November 30, 1999 that they do not intend to reissue any minor permits in FY 1999-00.

URBAN AREAWIDE STORMWATER

CA0029912	Contra Costa County Stormdrains	WMI
CA0029921	San Mateo County Urban Areawide Stormwater	WMI

Data Source: Region 2 response to Supplemental Workplan on November 30, 1999.

TABLE ONE
 FY 1999-00 COMBINED SECTION 104/106 WORKPLAN
 AMENDED NPDES PERMIT REISSUANCE COMMITMENT

REGION THREE

PERMIT NUMBER	AGENCY NAME	BACKLOG?	QUARTER			
			1	2	3	4
<u>MAJORS</u>						
CA0047996	Carmel Area WWD	WMI				x
CA0048127	City of Lompoc WWTP	WMI				x
CA0048151	City of Pismo Beach WWTP	No				x
CA0048143	City of Santa Barbara El Estero WWTP	No				x
CA0048194	City of Santa Cruz WWTP	Yes			x	
CA0007005	National Refractories, Moss Landing	WMI				x
CA0048003	South San Luis Obispo Co. SD WWTP	No				x
CA0049832	Texaco San Ardo Reclamation	WMI		x		
<u>MINORS</u>						
CA0047364	Carpinteria SD WWTP	WMI		x		
CA0049859	Castle Vegtech	WMI				x
CA0048267	CDPR Big Basin Park	WMI		x		
CA0047830	City of Avila Beach WWTP*	WMI				x
CA0047902	City of San Juan Bautista WWTP	WMI	x			
CAS049883	City of Santa Cruz Neary lagoon	WMI		x		
CA0048577	Esalen Institute WWTP	WMI				x
CA0005274	Granite Rock, Wilson Quarry	WMI	x			
CA0008069	Growers Ice	WMI		x		
CA0049441	Highlands Inn WWTP	WMI	x			
CA0049654	Mission Linen, Ambassador Laundry	WMI				x
CA0047791	Olive Springs Quarry	WMI	x			
CA0049417	Ragged Point Inn WWTP	WMI	x			
CA0048739	RMC Lonestar Olympia Sand Plant	WMI			x	
CA0048682	RMC Lonestar Santa Cruz Plant	Yes				x
CA0048364	Salinas Tallow Rendering Plant	WMI				x
CA0049221	Shell Oil-Capitola Road SS	Yes	x			

CA0048488	Silverking Farms Salmon Ranch	WMI	x	
CA0048780	Southern Pacific Milling, Quarry	WMI		x
CA0048976	Specta-Mat	WMI	x	
CA0005720	Uni-Kool, Inc., Abbott Street	WMI		x
CA0049123	UNOCAL SS #0216	Yes		x
CA0049450	UNOCAL SS #4605	Yes		x

URBAN AREAWIDE STORMWATER

CAS??	Salinas Metropolitan Area	WMI		
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Source: Region 3 response to Supplemental Workplan.

TABLE ONE
 FY 1999-00 COMBINED SECTION 104/106 WORKPLAN
 AMENDED NPDES PERMIT REISSUANCE COMMITMENT

REGION FOUR

PERMIT NUMBER	AGENCY NAME	BACKLOG?	QUARTER			
			1	2	3	4
<u>MAJORS</u>						
CA0000680	ARCO, Wtson Refinery	Yes		x		
CA0054372	City of Avalon WWTP	WMI				x
CA0109991	Hyperion WWTP	Yes		x		
CA0053619	LA CSD Pomona WWRP	WMI				x
CA0053716	LA CSD Whittier Narrows WWRP	WMI				x
CA0053911	LA CSD San Jose Creek WWRP	WMI				x
CA0054119	LA CSD Long Beach WWRP	WMI				x
CA0054011	LA CSD Los Coyotes WWRP	WMI				x
CA0000353	LA DWP Haynes PP	WMI			x	
CA0063185	LA Refinery, Carson Plant	Yes		x		
CA0000035	LA Refinery, Wilmington Plant	Yes		x		
CA0055387	Mobil Oil, Torrance Refinery	Yes		x		
CA0054097	Oxnard WWTP	Yes		x		
CA0057177	Powerine Oil, Santa Fe Springs Refinery	WMI			x	
CA0001139	SCE Alamitos PP	WMI			x	
CA0000809	Shell Oil, Carson Plant	Yes		x		
CA0001333	Star-Kist Foods	Yes		x		
CA0003778	Texaco	Yes	x			
CA0003786	US Navy Long Beach Naval Shipyard	Yes		x		
<u>MINORS</u>						
CA0058343	ARCO Hathaway Terminal Tank Farm	WMI			x	
CA0061344	Bumble Bee Seafoods, Santa Fe Springs	WMI	x			
CA0057371	California Milk Producers Artesia Plant	WMI	x			
CA0053392	Canale Foods	WMI				x
CA0054127	Century Towers Condominium Assoc.	Yes			x	
CA0059498	Certified Alloy Products	WMI		x		
CA0054101	City of Santa Monica WTP	Yes	x			

CA0060577	Covina Irrigating, TP #1	WMI	x			
CA0060704	California Milk Producers Cogen.	WMI	x			
CA0001406	Douglas Aircraft, Long Beach Facility	WMI		x		
CA0002020	Equilon Enterprises	Yes		x		
CA0063304	Equilon Enterprises	Yes		x		
CA0063304	Exxon Co., USA	Yes		x		
CA0056863	GATX Tank Storage Terminals Co.	Yes		x		
CA0055115	Golden West Refining, Santa Fe Springs Refinery	WMI			x	
CA0058823	Golf 'N Stuff, Norwalk	WMI	x			
CA0063991	Hermetic Seal Corporation	WMI				x
CA0061336	Jayeast Development, Central Plaza	WMI	x			
CA0059099	LA County-Malibu Mesa	Yes	x			
CA0063371	LA County DPW Alamitos Barrier 1, 2, 3	WMI		x		

TABLE ONE

FY 1999-00 COMBINED SECTION 104/106 WORKPLAN
AMENDED NPDES PERMIT REISSUANCE COMMITMENT

REGION FOUR (CONT'D)

PERMIT NUMBER	AGENCY NAME	BACKLOG?	QUARTER			
			1	2	3	4

MINORS (CONTINUED)

CA0056995	LA DWP Tank Area H, J	WMI			x	
CA0057649	LA DWP Haynes Tank Area A, B, C, D	WMI			x	
CA0057665	LA DWP Haynes Tank Area E	WMI			x	
CA0057673	LA DWP Haynes Tank Area F, G	WMI			x	
CA0001821	Libbey Glass, City of Industry	WMI	x			
CA0061000	Lincoln Property Company	WMI			x	
CA0056120	Long Beach USD Millikan HS Natatorium	WMI				x
CA0059285	Marine Terminal, Berth 121	Yes		x		
CA0063801	McDonnell Douglas Aerospace	WMI			x	
CA0057070	MWD Weymouth Softening/Filtration Plant	WMI	x			
CA0056928	Norwalk Industries Auto Dismantling	WMI		x		
CA0056065	Paramount Petroleum Refinery	WMI			x	
CA0058726	Redman Equipment & Mfg. Co.	Yes		x		
CA0063509	Santa Fe Pacific Pipeline, Norwalk Pump Sta.	WMI		x		
CA0061191	SCE Pebbly Beach Desalination Plant	WMI				x

CA0064025	Sta-Lube, Inc.	Yes	x	
CA0057827	Stocker Resources	Yes	x	
CA0063011	Texaco Exploration and Production	Yes	x	
CA0064114	TRW Ground Water Treatment	WMI		x
CA0063975	Unocal, Former La Mirada Plant	WMI		x
CA0061425	UNOCAL Corp.	Yes	x	
CA0063461	U.S. Gypsum, La Mirada	WMI	x	
CA0056651	USC Wrigley Institute for the Environment	WMI		x
CA0059137	U.S. Navy-Defense Fuel Supply, Norwalk	WMI	x	
CA0061794	U.S. Navy-San Nicholas Island Desalination	WMI		x
CA0110175	U.S. Navy-San Clemente Island WWTF	Yes		x
CA0062031	Walnut Valley WD Tank Leak	WMI	x	
CA0059927	Wheelabrator Norwalk State Hospital Cogen.	WMI	x	
CA0055237	Wilmington Liquid Bulk Terminals	Yes	x	
CAG674001	General Permit (2 enrollees to be reviewed)	WMI		x
CAG834001	General Permit (1 enrollee to be reviewed)	WMI		x
CAG914001	General Permit (6 enrollees to be reviewed)	WMI		x
CAG994001	General Permit (32 enrollees to be reviewed)	WMI		x
CAG994002	General Permit (2 enrollees to be reviewed)	WMI		x
CAG994003	General Permit (2 enrollees to be reviewed)	WMI		x

URBAN AREA WIDE STORMWATER PERMITS

CAS063339	Ventura County	WMI	x	
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SOURCE: Input from Dennis Dasker of Region 4 in response to Supplemental Workplan.

TABLE ONE
 FY 1999-00 COMBINED SECTION 104/106 WORKPLAN
 AMENDED NPDES PERMIT REISSUANCE COMMITMENT

REGION FIVE

PERMIT NUMBER	AGENCY NAME	BACKLOG?	QUARTER			
			1	2	3	4
<u>MAJORS</u>						
<u>REDDING OFFICE</u>						
CA0083721	Bell Carter Olive Industrial WWTP	WMI				x
CA0004065	Simpson Paper	Yes			x	
<u>FRESNO OFFICE</u>						
CA0079219	City of Merced WWTP	WMI				x
<u>SACRAMENTO OFFICE</u>						
CA0079243	City of Lodi-White Slough WPCP	Yes		x		
CA0078735	City of Patterson WWTF	WMI				x
CA0078948	City of Turlock WWTP	WMI				x
CA0077691	City of Vacaville Easterly STP	WMI				x
CA0079651	Linda CWD	Yes				x
CA0077682	Sacramento Regional WWTP	Yes	x			
<u>MINORS</u>						
<u>REDDING OFFICE</u>						
CA0082490	Burney Forest Products, Cogeneration Facility	WMI		x		
CA0078921	City of Alturas WWTP	Yes	x			
CA0078930	City of Biggs STP	Yes			x	
CA0078441	City of Dunsmuir STP	Yes			x	
CA0004693	City of Shasta Lake WTP	Yes	x			
CA0004570	DFG-Feather River Fish Hatchery	Yes				x
CA0082350	DFG-Thermalito Annex Fish Hatchery	Yes				x
CA0081655	Indian Springs School Geothermal	WMI			x	
CA0077984	Lake Davis WTP	WMI			x	
CA0003981	Sierra Pacific, Burney Lumber Division	WMI				x

CA0083402	SST Oil Facility	Yes	x
<u>FRESNO OFFICE</u>			
CA0083151	Olcese WWTP	WMI	x

TABLE ONE
 FY 1999-00 COMBINED SECTION 104/106 WORKPLAN
 NPDES PERMIT REISSUANCE COMMITMENT

REGION FIVE (CONT'D)

PERMIT NUMBER	AGENCY NAME	BACKLOG?	QUARTER			
			1	2	3	4
<u>MINORS (CONT'D)</u>						
<u>SACRAMENTO OFFICE</u>						
CA0082775	Castle AFB-Wallace Road GWTP	Yes		x		
CA0083305	El Dorado Hills Reclamation Project	WMI	x			
CA0082929	General Petroleum Cleanup	Yes		x		
CA0081477	Homestake Mining-McLaughlin Mine	WMI		x		
CA0081787	Lawrence Livermore Lab, Site 300 Cooling Water	WMI			x	
CA0079341	Placer Co. – Sheridan WWTP	Yes		x		
CA0083330	Riverbank Army Ammunition Depot	WMI		x		
CA0004928	Stillwater Orchards – Hood Cold Storage	Yes				
<u>URBAN AREAWIDE STORMWATER PERMITS</u>						
CA0083500	Fresno Metropolitan FCD (Fresno Office)	WMI				x
CA0083399	Kern County/Bakersfield (Fresno Office)	WMI				x
CA0083313	Contra Costa County Areawide Stormwater	WMI				

Source: Region 5 response to Supplemental Workplans

TABLE ONE
 FY 1999-00 COMBINED SECTION 104/106 WORKPLAN
 AMENDED NPDES PERMIT REISSUANCE COMMITMENT

REGION SIX

PERMIT NUMBER	AGENCY NAME	BACKLOG?	QUARTER			
			1	2	3	4
<u>MAJORS</u>						
CA0102725	Avocet Tungsten	WMI				x
CA0102822	Victor Valley Municipal WWTP	WMI				x
<u>MINORS</u>						
CA0102806	DFG-Fish Springs Fish Hatchery	WMI				x
CA0102792	DFG-Black Rock Fish Hatchery	WMI				x
CA0102814	DFG-Mojave River Fish Hatchery	WMI				x
CA0102784	DFG-Mt. Whitney Fish Hatchery	WMI				x
CA0102776	DFG-Hot Creek Fish Hatchery	WMI				x
CA0103047	National Cement Corp., Lafarge	Yes				x
<u>URBAN AREAWIDE STORMWATER</u>						
CAG616001	Tahoe Urban Areawide Stormwater	WMI				x
CAG616002	Lake Tahoe H.U. Stormwater-Construction Activities	WMI				x
CAS616003	Tuscarora Gas Pipeline Project	WMI				x

Source: Region 6 response to Supplemental Workplans.

TABLE ONE
 FY 1999-00 COMBINED SECTION 104/106 WORKPLAN
 AMENDED NPDES PERMIT REISSUANCE COMMITMENT

REGION SEVEN

PERMIT NUMBER	AGENCY NAME	BACKLOG?	QUARTER			
			1	2	3	4
<u>MAJORS</u>						
CA0104523	City of Brawley WWTP	WMI				x
CA0104477	Valley SD SWTP	WMI				x
<u>MINORS</u>						
CA0104876	Geo East Mesa Cooling Tower	Yes				x
CA7000004	IID-Grass Carp Hatchery	Yes		x		
CA0105066	Imperial Resource Recovery CMS Generation	Yes		x		
CA0104400	City of Imperial WPCF	WMI				x
CA0104370	Heber PUD	WMI		x		
CA0104990	New Charleston PP	Yes		x		

Source: Region 7 has made a decision to spread their NPDES permit reissuance workload as evenly as possible over the next five years. This is reflected in the WMI Chapter Appendix tables. As a result, some backlogged permits will not be reissued until future years.

TABLE ONE
 FY 1999-00 COMBINED SECTION 104/106 WORKPLAN
 AMENDED NPDES PERMIT REISSUANCE COMMITMENT

REGION EIGHT

PERMIT NUMBER	AGENCY NAME	BACKLOG?	QUARTER			
			1	2	3	4
<u>MAJORS</u>						
CA0001163	AES Huntington Beach, L.L.C.	Yes				x
CA8000344	Big Bear Lake STP	WMI				x
CA0105236	City of Colton STP	WMI				x
CA0105350	City of Riverside STP	WMI				x
CA0105392	City of San Bernardino STP	WMI				x
CA8000304	Colton/San Bernardino RTT&WRA	Yes				x
CA8000027	Elsinore Valley MWD STP	WMI				x
CA0105279	Inland Empire Utilities Agency (Chino Basin), RP #1	WMI				x
CA1015287	Inland Empire Utilities Agency (Chino Basin), RP #2	WMI				x
CA8000326	Irvine Ranch WD STP	WMI				x
<u>MINORS</u>						
CA0105376	City of Beaumont STP No. 1	WMI				x
CA8000297	City of Lake Elsinore Geothermal	WMI			x	
CA8000305	City of Tustin-Desalter	WMI				x
CA8038001	General Boatyard Permit	WMI				x
CAG018001	General Dairies Permit	WMI		x		
CA8000031	Great Lakes Chemical GW Cleanup	WMI				x
CA0001210	Mountainview Power Company (SCE San Bernardino PP)	WMI				x
CA0106828	Nuevo Energy, Platform Esther	WMI				x
CA0001555	Riverside Canal Co. (SCE Highgrove PP)	WMI				x
CA8000101	Rohr Corporation	Yes				x
CA8000376	Rubidoux Comm. Services Dist. – WTP, Wells 4 & 6	WMI				x
CA0106488	UC Irvine Water Softener Brines	WMI				x
<u>STORMWATER PERMITS</u>						
CA8000349	California Cascade Industries	WMI				x

CA8000312	Cardinal Development Company – Stormwater	WMI		x
CA0107069	Cargill, Incorporated – Stormwater	WMI		x
CA8000279	Caltrans – General Stormwater	WMI	x	
CA8000065	Consolidated Waste Industries Stormwater	WMI	x	
CA0105953	Huntington Beach Company – Production Facility Storm	WMI		x
CA8000127	Industrial Waste Utilization – Stormwater	WMI	x	
CA0106348	Los Alamitos Race Course Stormwater	WMI		x
CA0105899	Morton International, Inc. – Stormwater	WMI	x	

Source: Region 8 response to Supplemental Workplans. Region 8 does not intend to reissue the General Boatyard permit, which has expired. Enrollees will be transferred to the Statewide General Industrial Stormwater Permit.

TABLE ONE
 FY 1999-00 COMBINED SECTION 104/106 WORKPLAN
 AMENDED NPDES PERMIT REISSUANCE COMMITMENT

REGION NINE

PERMIT NUMBER	AGENCY NAME	BACKLOG?	QUARTER			
			1	2	3	4
<u>MAJORS</u>						
CA0107981	City of Escondido – Hale Ave. WPCF	No		x		
CA0107433	City of Oceanside Outfall	No			x	
CA0107395	Encina Wastewater Authority Outfall	No				x
CA0108031	Fallbrook Public Utility District	No			x	
CA0107999	San Elijo JPA/San Elijo WPCF	No		x		
CA0101350	SDG&E Encina Plant	No			x	
CA0107417	SERRA Outfall	No			x	
CA0101228	So. Calif. Edison SONGS Unit No.1	No				x
CA0108073	So. Calif. Edison SONGS Unit No. 2	No	x			
CA0108181	So. Calif. Edison SONGS Unit No. 3	No	x			
CA0108961	USMC Camp Pendleton STP No. 1	No	x			
CA0108979	USMC Camp Pendleton STP No. 2	No	x			
CA0108987	USMC Camp Pendleton STP No. 3	No	x			
CA0108995	USMC Camp Pendleton STP No. 8	No	x			
CA0109002	USMC Camp Pendleton STP No. 13	No	x			
<u>MINORS</u>						
CA0107450	Culligan Water Conditioning	No		x		
CAG919001	Groundwater Extraction General Permit – San Diego Bay	No				x
CA0103565	Mission Linen Supply	No			x	
CA0108391	Mountain Water Ice	No			x	
CA0107336	SeaWorld	No			x	
CA0107239	Scripps Institute of Oceanography	No		x		
CA0107891	SDUPD Fish Sorting Slabs	No				x
CA0108286	USMC Camp Pendleton STP #12, San Mateo	Yes	x			

TABLE ONE
 FY 1999-00 COMBINED SECTION 104/106 WORKPLAN
 AMENDED NPDES PERMIT REISSUANCE COMMITMENT

REGION NINE

PERMIT NUMBER	AGENCY NAME	BACKLOG?	QUARTER			
			1	2	3	4

<u>AREAWIDE STORMWATER</u>						
CA0108758	San Diego County Urban Areawide Stormwater		WMI			

Source: Input from Mike McCann on December 2, 1999. CA0108286 has expired and will not be reissued. Discharge will be regulated under WDR. Several permits listed by error in the original workplan have been deleted.

TABLE TWO
FY 1999-2000 COMBINED SECTION 104/106 WORKPLAN
AMENDED PRETREATMENT AUDIT/INSPECTION COMMITMENT

Region	Program Name	Inspection Type	Inspection Date
1	Crescent City	pci	30-Sep-1999
1	Eureka, City of	pci	30-Sep-1999
1	Santa Rosa, City of	pci	30-Sep-1999
2	Burlingame, City of	pca	31-Dec-1999
2	Central Contra Costa	pci	31-Aug-1999
2	Central Marin Sanitation Authority	pca	31-Dec-1999
2	Delta Diablo Sanitation District	pci	31-Jan-2000
2	Dublin San Ramon Sanitation District	pca	31-May-2000
2	Millbrae, City of	pca	30-Apr-2000
2	Napa Sanitation District	pci	30-Jun-2000
2	Novato Sanitation District	pci	31-Jan-2000
2	Oro Loma Sanitation District	Pca	31-Oct-1999
2	Petaluma, City of	Pci	30-Apr-2000
2	San Leandro, City of	Pca	28-Feb-2000
2	San Mateo, City of	Pci	30-Jun-2000
2	Sunnyvale, City of	Pci	28-Feb-2000
2	West County Wastewater District	Pci	30-Jun-2000
3	Goleta, City of	Pca	01-Jun-2000
3	Monterey Regional	Pci	01-Jul-1999
3	Santa Barbara, City of	Pci	01-Jan-2000
3	Santa Cruz, City of	Pci	01-Jun-2000
4	Burbank, City of	Pci	01-Mar-2000
4	Camarillo Sanitation District	Pci	01-Feb-2000
4	Ojai	Pci	01-Apr-2000

4	Oxnard	Pci	01-May-2000
4	Los Angeles, City of	Pca	01-Feb-2000
4	Simi Valley County Sanitation District	Pci	01-Mar-2000
4	Thousand Oaks, City of	Pci	01-Aug-1999
4	Ventura Regional Sanitation District	Pci	01-Nov-1999
4	Ventura, City of	Pca	01-Nov-1999
5F	Fresno, City of	Pci	30-Jun-2000
5F	Merced, City of	Pci	30-Jun-2000
5F	Bakersfield, City of	Pca	30-Jun-2000
5R	Chico, City of	Pca	30-Sep-1999
5R	Oroville, City of	Pca	30-Jun-2000
5S	Roseville, City of	Pca	30-Sep-1999
5S	Vacaville, City of	pci	31-Dec-1999
5S	Woodland, City of	pca	30-Jun-2000
5S	Modesto, City of	pci	31-Mar-2000
5F	Hanford, City of	pci	31-Mar-2000
5F	Reedley, City of	Pci	31-Mar-2000
5F	Tulare, City of	pci	31-Mar-2000
5S	Stockton, City of	pci	31-Mar-2000
8	Western Riverside County Regional Wastewater Authority	pca	30-Sep 1999
8	Inland Empire Utilities Agency	pci	30-Nov-1999
8	Eastern Municipal Waste District	pci	30-Apr-2000
8	City of Redlands	pci	28-Feb-2000
8	City of San Bernardino	pci	31-Oct-1999
8	Irvine Ranch Water District	pci	31-Aug-1999
9	Aliso Water Management Agency	pci	30-June 2000
9	Escondido, City of	pci	31-Mar-2000
9	Oceanside, City of	pci	31-Jan-2000
9	Rancho California Water District	pci	31-Oct-1999
9	San Diego, City of	pca	28-Feb-2000

9	Serra	pci	30-Jun-2000
9	Encina Wastewater Authority	pca	31-Aug-1999

Source: Provided by Regulation Unit based on Regional Board response to baseline workplans.

Region 6 states that they will be conducting preliminary work incident to developing an approved pretreatment program for Victor Valley WWRA during FY 1999-00. This is proposed to include site inspection(s) as needed.

FIGURE ONE
FY 1999-00 COMBINED SECTION 104/106 WORKPLAN
SCHEDULE OF PERIODIC REPORTS TO EPA

SUBJECT OF REPORT	SUBMITTAL DATE	SUBMITTED TO
FY 1998-99 End Of Year Report on Permitting, Compliance Inspections, DMR Reviews	August 31, 1999	Mark Flachsbart for EPA internal distribution
FY 1999-00 First, Second, Third Quarter Reports on Permitting, Compliance Inspections, DMR Reviews	October 31, 1999 January 31, 2000 April 30, 2000	Mark Flachsbart for EPA internal distribution
Annual Quality Assurance Program Status Report	November 15, 1999	Mark Flachsbart for internal EPA distribution
FY 1997-98 End Of Year Pretreatment Activities	August 31, 1999	Bob Wills
FY 1998-99 First, Second, Third Quarter Pretreatment Activities Reports	October 31, 1999 January 31, 2000 April 30, 1999	Bob Wills
FY 1997-98 End Of Year Enforcement Actions-Electronic Transfer	July 6, 1999	Carey Houk
FY 1998-99 First, Second, Third Quarter Enforcement Actions-Electronic Transfer	October 6, 1999 January 6, 2000 April 6, 2000	Carey Houk
FY 1997-98 End Of Year Enforcement Actions Report	August 31, 1999	Dan Meer
FY 1998-99 First, Second, Third Quarter Enforcement Actions Reports	October 31, 1999 January 31, 2000 April 30, 2000	Dan Meer
FY 1997-98 End Of year Status of Judicial Actions and ACLs	August 31, 1999	Dan Meer

FY 1998-99 First, Second, Third Quarter Judicial Actions and ACLs Reports	October 31, 1999 January 31, 2000 April 30, 2000	Dan Meer
FY 1997-98 End Of Year Compliance Inspections-Electronic Transfer	July 31, 1999	Carey Houk
FY 1998-99 First, Second, Third Quarter Compliance Inspections-Electronic Transfer	October 31, 1999 January 31, 2000 April 30, 2000	Carey Houk

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Latest Revision Date: December 8, 1999