



**STATE OF CALIFORNIA  
NONPOINT SOURCE PROGRAM  
FIVE-YEAR IMPLEMENTATION  
PLAN**

**July 2003 through June 2008**

**Prepared by:**

**State Water Resources Control Board  
and  
California Coastal Commission  
In cooperation with the  
Nonpoint Source Interagency Coordinating Committee**

**DECEMBER 2003**

# ACKNOWLEDGEMENTS

This Document was prepared by the State Water Resources Control Board, the California Coastal Commission, and the Nonpoint Source Interagency Coordinating Committee (IACC). The IACC agencies that participated in the planning process include: the California Integrated Waste Management Board, California Resources Agency, California Department of Forestry and Fire Protection, California Department of Boating and Waterways, California Department of Conservation, California Department of Fish and Game, California Bay Delta Authority, California Department of Food and Agriculture, California Department of Health Services, California Department of Parks and Recreation, California Department of Pesticide Regulation, California Department of Toxic Substances Control, North Coast Regional Water Quality Control Board, San Francisco Bay Regional Water Quality Control Board, Central Coast Regional Water Quality Control Board, Los Angeles Regional Water Quality Control Board, Central Valley Regional Water Quality Control Board, Lahontan Regional Water Quality Control Board, Colorado River Basin Regional Water Quality Control Board, Santa Ana Regional Water Quality Control Board, San Francisco Bay Conservation and Development Commission, California State Lands Commission, and the United States Environmental Protection Agency.

## TABLE OF CONTENTS

INTRODUCTION AND OVERVIEW	
A. Introduction.....	1
B. NPS Program Goals and Five-Year Implementation Plan Objectives	2
C. NPS Program Assurance	5
D. Document Organization	9
SECTION I - ALL OR MULTIPLE LAND USE CATEGORIES.....	Section I, Page 1
A. 2003-2008 Implementation Plan Objectives	1
B. Activities Addressing All or Multiple Land Use Categories	1
SECTION II – AGRICULTURE CATEGORY.....	Section II, Page 1
A. Agriculture MMs and Issues of Concern	1
B. Relation to Other SWRCB Programs	2
C. Additional Management Measure Proposal	2
D. Objectives and Activity Summary	4
SECTION III – FORESTRY CATEGORY.....	Section III, Page 1
A. Forestry MMs and Issues of Concern	1
B. Relation to Other State Programs	2
C. Objectives and Activity Summary	3
SECTION IV – URBAN CATEGORY.....	Section V, Page 1
A. Urban MMs and Issues of Concern	1
B. Relation to Other State Programs	2
C. Objectives and Activity Summary	5
SECTION V – MARINAS AND RECREATIONAL BOATING CATEGORY.....	Section V, Page 1
A. Marinas MMs and Issues of Concern	1
B. Relation to Other State, Federal, and Local Programs	2
C. Objectives and Activity Summary	4
SECTION VI – HYDROMODIFICATION CATEGORY.....	Section VI, Page 1
A. Hydromodification MMs and Issues of Concern	1
B. Relation to Other State and Federal Programs	2
C. Objectives and Activity Summary	2
SECTION VII – WETLANDS, RIPARIAN AREAS AND VEGETATED TREATMENT SYSTEMS.....	Section VII, Page 1
A. Wetlands Category MMs and Issues of Concern	1
B. Relation to Other SWRCB Programs	1
C. Objectives and Activity Summary	2
SECTION VIII – OTHER ACTIVITIES.....	Section VIII, Page 1
A. Abandoned Mines Issues of Concern	1
B. Marine Native Plant Restoration	2
C. Marine Invasive Species Control	2
D. Abandoned Mines and Their Relation to Other SWRCB Programs	2
E. Activity Summary	2

## LIST OF TABLES

TABLE	CONTENTS	
IO-1	Summary of Major Tasks.....	Introduction & Overview, Page 11
I	List of Activities Addressing All or Multiple Land Use Categories.....	Section I, Page 2
IIA	Agriculture Category MMs.....	Section II, Page 1
IIB	List of Activities Addressing Agriculture Land Uses.....	5
IIIA	Forestry Category MMs.....	Section III, Page 1
IIIB	List of Activities Addressing Forest Land Uses.....	5
IVA	Urban Category MMs.....	Section IV, Page 1
IVB	List of Activities Addressing Urban Land Uses.....	7
VA	Marinas Category MMs.....	Section V, Page 1
VB	List of Activities Addressing Marinas Land Uses.....	6
VIA	Hydromodification Category MMs.....	Section VI, Page 1
VIB	List of Activities Addressing Hydromodification Land Uses .....	4
VIIA	Wetlands Category MMs.....	Section VII, Page 1
VIIB	List of Activities Addressing Wetlands Land Uses.....	4
VIII	List Addressing Other NPS Activities.....	Section VIII, Page 1
	List of Activities Addressing Other Land Uses.....	3

## LIST OF APPENDICES

APPENDIX	CONTENTS
I	List of Acronyms
II	Management Measure Descriptions
III	Category Objectives Descriptions
IV	Comment Letters (10) to Five-Year Plan and SWRCB Responses

# NONPOINT SOURCE FIVE-YEAR IMPLEMENTATION PLAN - INTRODUCTION AND OVERVIEW

## A. INTRODUCTION

In 1998, the State of California began the implementation of its Fifteen-Year Program Strategy (Strategy) for the Nonpoint Source Pollution Control Program (NPS Program), as delineated in the *Plan for California's Nonpoint Source Pollution Control Program* (NPS Program Plan). The Strategy described the vision and goals of the NPS Program, including the basic NPS Program process elements of planning, coordination, implementation, monitoring and tracking, and assessment and reporting of NPS Program activities. The NPS Program Plan also divided the fifteen-year Strategy into three, five-year implementation periods, with direction towards achieving the goals and objectives of the NPS Program, culminating in complete management measure (MM) implementation by the year 2013.

The first five-year implementation plan was developed by the State Water Resources Control Board (SWRCB), the Regional Water Quality Control Boards (RWQCBs), and the California Coastal Commission (CCC) as part of the NPS Program Plan. This implementation plan focused on the activities of the SWRCB, RWQCBs, and the CCC. The inclusion of activities of other State agencies with NPS related authorities and responsibilities began with the Interagency Coordinating Committee (IACC) in 2001, already three years into the five-year implementation period. The IACC agencies involved in that process submitted to the SWRCB their tabulated list of activities that could be included in the *Second Addendum to the First, Five-Year NPS Implementation Plan* (Second Addendum). The Second Addendum was completed in September 2001, less than 18 months prior to beginning development of this document. Although this proved to be an important beginning to the cooperative process which is now being developed more fully, the timing created an abbreviated period during which the participating agencies could work through their NPS-related activities, incorporate collaborative processes with other agencies, or otherwise adjust activities and develop improvements.

The process of developing the *NPS Program Five-Year Implementation Plan (2003-2008)* (NPS Implementation Plan) began in February 2002, and included the consideration of what had been accomplished thus far in the first, five-year period. Other than the ability to begin the planning process before the implementation period actually began, there were several additional changes that took place in this process. They included:

1. The development of NPS Implementation Plan Objectives, which were drafted through the IACC subcommittees for the six NPS land use categories. This was a significant effort at collaboration that had not taken place during the development of the Second Addendum.

2. The consideration of "performance measures" that could be utilized to evaluate success in meeting the NPS Implementation Plan Objectives at the end of the second, five-year implementation period. This process also utilized the IACC subcommittee structure.
3. The development of a database for the NPS Implementation Plan to be used by all of the participating IACC agencies. The database includes all of the agency activity information that provided in this document, as well as available fields to be used for contact, funding, location, watershed, pollutant/stressor, deliverables, and other information that will be essential in the development of collaborative processes.

As the State embarks upon the second, five-year implementation period, it is important to consider the original goals of the NPS Program and to re-evaluate them as they pertain to the NPS Implementation Plan. The following section summarizes the NPS Program Goals and identifies objectives for the Five-Year Implementation Plan.

## **B. NPS PROGRAM GOALS AND FIVE-YEAR IMPLEMENTATION PLAN OBJECTIVES**

### **1. Original NPS Program Strategy Vision and Goals**

The NPS Program Plan was developed to focus and expand the State's NPS pollution control efforts for the fifteen year period from 1998 through 2013. The "vision" of the NPS Program is to "...reduce and prevent NPS pollution so that the waters of California support a diversity of biological, educational, recreational, and other beneficial uses." To meet this vision, the NPS Program Plan provided five general goals (focused on the NPS Program process elements) and eleven supporting or more specific goals. The five NPS Program Goals (bold) and eleven supporting goals are provided below:

#### **1) Track, monitor, assess, and report NPS Program activities.**

- a. Improve monitoring and assessment of State water quality and the effectiveness of management practices (MPs) that are implemented to prevent and control NPS pollution.
- b. Ensure consistent, accurate reporting and dissemination of information related to water quality and related environmental data, sources of NPS pollutants, and pollution control and prevention activities.

#### **2) Target NPS Program activities.**

- a. Manage NPS pollution, where feasible, at the watershed level – including pristine areas and watersheds that contain water bodies on the Clean Water Act (CWA) section 303(d) list – where local stewardship and site-specific MPs can be implemented through comprehensive watershed protection or restoration plans.
- b. Apply previous experiences to future decisions (e.g., through the use of pilot projects and the incorporation of "lessons learned").

**3) Coordinate with public and private partners in all aspects of the NPS Program.**

- a. Build the NPS Program upon a foundation of public involvement and support and encourage public participation throughout all stages of the NPS Program.
- b. Encourage innovative approaches to NPS pollution control and prevention through interagency, interdisciplinary, and volunteer activities.
- c. Strive to make regulatory, planning, and monitoring processes and programs more effective, efficient, and user-friendly and to coordinate related programs to avoid duplication where possible.

**4) Provide financial and technical assistance and education.**

- a. Enhance the leadership roles of the SWRCB, RWQCBs, CCC, and other agencies in providing local governments and the public with technical and financial assistance and educational programs related to NPS pollution control, land use management, and watershed management.
- b. Support applied research to expand NPS Program implementation (e.g., development of improved, cost-effective MPs, and environmentally friendly products).

**5) Implement MMs and associated MPs.**

- a. Ensure the protection and restoration of State's water quality, existing and potential beneficial uses, critical coastal areas (CCAs), and pristine areas by implementing MMs to prevent and control NPS pollution. All MMs will be implemented, where needed, by 2013. MMs serve as general goals for the control and prevention of polluted runoff. Site-specific MPs are then used to achieve the goals of each MM.
- b. Target implementation of MMs using a combination of non-regulatory activities and enforceable policies and mechanisms with self-determined cooperation preferred over prescriptive measures.

Part of the process that will ensure that the NPS Program Goals are met includes the Strategy and the successive five-year NPS implementation plans. This document is itself is the second of the three Five-Year Plans, for the period 2003-2008. The NPS Implementation Plan includes five-year objectives, which guide the activities that will be taking place during this period and support the goals articulated in the NPS Program Plan.

**2. NPS Implementation Plan Objectives**

An integral part of the development of the NPS Implementation Plan, was establishing meaningful objectives and associated steps that support the eleven specific goals

presented in the NPS Program Plan. Over a period of approximately one year, the IACC met frequently to develop a series of objectives and supporting steps to satisfy these requirements. Four main objectives were developed for the NPS Implementation Plan along with thirteen specific steps to achieve these objectives. The four main objectives and the thirteen steps (along with their relationship to the NPS Program Goals) are provided below.

**1) Promote the implementation of MMs and related practices by all levels of water quality managers (federal, State, watershed groups, and other stakeholders).**

Steps for accomplishing this include the following:

- a) Develop a consistent message and informational materials, training and technical advice to support NPS programs and providing these to all levels of government and other stakeholders. (*NPS Program Goals: 1a, 2c, 4a, 4b*)
- b) Invite and encourage participation of federal and local governments in the IACC and subcommittees as appropriate. (*NPS Program Goals: 3a, 3b, 3c, 4a*)
- c) Support the creation of agency policies at all levels of government that implement NPS MMs. (*NPS Program Goals: 3b,4a, 4b, 5a, 5b*)
- d) Provide a mechanism(s) to simplify the process of distributing information regarding the NPS Program, MMs, monitoring results, and other NPS program technical information. (*NPS Program Goals: 1a, 1b, 3a, 3c, 4a*)
- e) Develop a tracking mechanism(s) for MM and MP effectiveness that can be used by and shared with other agencies and the public. (*NPS Program Goals: 1a, 1b, 3c*)

**2) Preserve water quality in water bodies that are currently meeting California water quality standards and protect them from future degradation from the impacts of nonpoint source pollution.**

Steps for accomplishing this include the following:

- a) Adopt and enforce additional agency policies to implement MMs in water bodies that are currently meeting California water quality standards and to protect them from further degradation from the impacts of nonpoint source pollution. (*NPS Program Goals: 2a, 3c, 4a, 5b*)
- b) Define or refine criteria for watershed management plans and/or local coastal plans that will successfully address NPS pollution for all waters. (*NPS Program Goals: 1a, 1b, 2a, 4a, 5b*)
- c) Encourage development and implementation of watershed management plans for all waters of the state at a scale appropriate to implement MMs and MPs. (*NPS Program Goals: 2a, 3a, 3c, 4a*)

**3) Promote the implementation of MMs and use of MPs for the NPS component of total maximum daily loads (TMDLs) or in CWA section 303(d) listed water bodies in order to improve water quality.**



Steps for which include the following:

- a) Ensure that the NPS components of the TMDL implementation plan are accounted for in five-year NPS plans of State agencies as appropriate. (*NPS Program Goals: 1b, 2a, 3c, 5a, 5b*)
- b) Coordinate with the TMDL program and Regional Board NPS Staff to determine implementation and effectiveness of MMs and MPs. (*NPS Program Goals: 1a, 1b*)

**4) Promote better leverage of inter-agency and private entity resources for NPS Programs.**

Steps for which include the following

- a) Continue with periodic IACC meetings and other interagency coordination efforts. (*NPS Program Goals: 2a, 3b, 3c, 4a*)
- b) Seek additional collaborative interagency efforts for NPS pollution prevention. (*NPS Program Goals: 2a, 3b, 3c, 4a*)
- c) Complete a strategic plan for NPS Program that will include a report on the extent of implementation already accomplished (as of 2003), an assessment of what remains to be accomplished and a defined approach to achieve it. (*NPS Program Goals: 1a, 2a, 2b, 3a, 3b, 3c, 4a*)

In addition to the overall NPS Implementation Plan Objectives, the IACC developed specific objectives for each NPS land use category. These ‘NPS Category Objectives’ are supportive of the overall NPS Implementation Plan Objectives, as well as of the NPS Program Goals. The purpose of the NPS Category Objectives development effort was to provide objectives that have targeted and measurable results and to ensure that all land use categories and all MMs are included in the implementation process. These objectives will be utilized to guide implementation plan activities and evaluate the State’s performance in achieving the NPS Implementation Plan Objectives.

The NPS Category Objectives will be reviewed and refined throughout the five-year implementation period. This effort will take place in order to continually align them more specifically to address actual water quality effects and changes, such as de-listing of impaired water bodies or with indicators of preservation of high quality water bodies.

### **C. NPS PROGRAM ASSURANCE**

There are a several major activities that are taking place in the California that will help ensure that the NPS Program Vision and Goals can be met. Some of these activities are specific to the NPS Program, for which the SWRCB is solely responsible, and still more take a broader approach and utilize a multi-agency mechanism to address NPS pollution control.

These activities include:

## **1. The NPS Implementation and Enforcement Policy**

The *Policy for Implementation and Enforcement of NPS Pollution Control Program* (NPS Implementation and Enforcement Policy) will explain how the Porter-Cologne Water Quality Control Act mandates and authorities, delegated to the SWRCB and the RWQCBs, will be used to implement and enforce the NPS Program Plan. These authorities include waste discharge requirements (WDRs), waivers of WDRs, and basin plan prohibitions. This policy will also provide a bridge between the NPS Program Plan and the *SWRCB Water Quality Enforcement Policy* adopted by the SWRCB in 2002. The information being developed will assist all responsible and/or interested parties in understanding how the state's NPS water quality control requirements will be implemented and/or enforced. The parties involved include the SWRCB and the RWQCBs, federal, state and local agencies, dischargers, designated third-party participants and any other interested public and private parties.

## **2. Water Quality Monitoring for NPS Program Effectiveness**

In coordination with the California Department of Fish and Game (CDFG), the SWRCB through the Surface Water Ambient Monitoring Program (SWAMP), CCC, the RWQCBs, and the U. S. Environmental Protection Agency (U.S.EPA) are developing a monitoring approach designed to evaluate the effectiveness of the NPS Program. The NPS Monitoring Program is being designed to address a series of management questions that need to be answered to provide improved implementation of the NPS Program. These six questions are:

- (a) *What is the quality of water in California?* Provide information to indicate the extent and location of water quality impairments, threatened water bodies, and high quality waters.
- (b) *What is the extent of impairments associated with nonpoint sources?* Provide information that indicates the extent and location of impairments associated with nonpoint sources vs. point sources.
- (c) *What are the nonpoint sources that are impairing or threatening water quality?* Provide information as to the pollutants or stressors associated with the impairments or threats to water quality and the related land use activities.
- (d) *Is water quality getting better or worse?* Provide information to determine temporal and spatial (e.g., land use category) trends in impairment of water quality for nonpoint sources vs. point sources.
- (e) *Is the NPS Program investing resources consistent with water quality problems?* Provide information with respect to the location and extent of expended resources with respect to threatened and impaired water bodies and implementation of MMs and MPs.

(f) *Are NPS investments effective in protecting and restoring water quality?* Provide information with respect to water quality improvements resulting from investments in specific MM/MP implementation activities.

To date, these coordination efforts have focused on expanding the U.S.EPA's Environmental Monitoring and Assessment Program (EMAP) in California. The EMAP expansion, known as the California Monitoring and Assessment Program (CMAP) will begin in 2004 and is being designed to provide answers to some of the NPS monitoring questions. These coordination activities will also be integrated with consulting efforts with Tetra Tech Consultants (under contract with U.S.EPA through the CWA section 319 grant program) to develop an overall monitoring strategy for the NPS Program.

### **3. The Interagency Coordinating Committee (IACC)**

The IACC is referenced throughout this document, and refers to a group of 28 different state agencies that work together to protect water quality from NPS pollution. The IACC developed the NPS Implementation Plan Objectives, the NPS Category Objectives through NPS land use subcommittees, and worked collaboratively for many months to produce the activity listings that are provided in this document. The IACC will continue to utilize the products that resulted from that effort and to promote collaborative processes in their program implementation. The primary duties of the IACC organization are to: (a) improve interagency coordination and to promote statewide consistency in NPS Programs; (b) promote a watershed approach in addressing NPS pollution; and (c) provide a forum for resolving policy and programmatic conflicts among State agencies involved in NPS pollution control.

### **4. Statewide Watershed Management Activities**

The California Environmental Protection Agency (Cal/EPA) and the California Resources Agency (Cal/RA) recently developed a *Watershed Management Strategic Plan* (WMSP) (August 2003). The WMSP was developed pursuant to recommendations in a *Report to the Legislature, (as required by Assembly Bill 2117, Chapter 735, Statutes of 2000)*. The WMSP is guided by a Steering Committee with representatives from the key State agencies, and although broader in scope with respect to water management issues, it will certainly enhance implementation of the NPS Program.

In a separate effort, Cal/EPA and Cal/RA are parties to a memorandum of understanding (MOU) intended to improve integration and coordination of watershed policies, funding, and program implementation. Another product of the MOU is the California Watershed Council (CWC) which will serve in an advisory capacity to the secretaries of the Cal/EPA and Cal/RA. The first meeting of the CWC was held on August 28, 2003, and was attended by numerous representatives of both public and private stakeholders.

## **5. SWRCB NPS Related Funding Programs**

The SWRCB has an extensive funding program related to NPS pollution control. The NPS Program provides the framework through NPS Program Plan from which project proponents for this funding can design their respective programs. These funding programs are managed by (or in part by) the SWRCB through the Division of Financial Assistance (DFA) and include the following:

- Proposition 13: Costa-Machado Water Act of 2000 (Proposition 13) - NPS Pollution Control Program;
- Proposition 13: Coastal NPS Pollution Control Program;
- Proposition 13: CALFED Drinking Water Quality Program;
- Proposition 40: Watershed, Clean Beaches, and Water Quality Act
- Proposition 50: 2002 Water Bond Law - CALFED Drinking Water Quality Program;
- CWA section 319(h) - NPS Implementation Program; and
- State Revolving Fund Loan Program.

Many of these programs have specific set-asides for expenditures in the areas of watershed management and NPS pollution prevention. Additionally, there is a significant effort in DFA to streamline and improve the grant process to ensure effective and timely distribution of bond funds and so that the best, most cost-effective projects are selected.

## **6. SWRCB Total Maximum Daily Load Program**

Section 303(d)(1)(C) of the CWA requires the State to establish TMDLs for “303(d) listed water bodies” for those pollutants, from both point and nonpoint sources, determined by U.S. EPA to be suitable for TMDL measurement. The 2002 list, which is the most current approved list for California, requires the development of plans for addressing impaired waters in over 1,800 waterbody/pollutant combinations. (Note: One waterbody can be listed for numerous pollutants.) The TMDL program provides an assessment and planning framework for identifying load reductions or other actions needed to attain water quality standards.

The planning process for TMDL development is divided into two parts. Part 1 establishes and apportions the allowable level(s) of pollution in the water body (or watershed) necessary to achieve water quality standards. The recommended methods for achieving the necessary reductions in pollutant loadings are detailed in the second part of this process--the TMDL implementation plan. The implementation plan must include: (1) a description of the nature of the actions necessary to achieve the water quality objectives, including recommendations for appropriate action by any entity, public or private; (2) a time schedule for the actions to be taken; and (3) a description of the monitoring and surveillance to be undertaken to determine compliance with the objectives.

To date 19 TMDLs have gone through the full approval process including approval by U. S. EPA and 132 are at various stages of development or approval at the RWQCBs or the SWRCB. During the five-year period of the NPS Implementation Plan, Regional Boards project completing 60 to 80 TMDLs. Because individual TMDLs are developed to address multiple waterbody/pollutant combinations, it is proposed that by 2008 nearly all of the over 1800 listings will have TMDLs either completed or in some stage of development.

In summary, TMDLs are a planning effort that will enhance the State's ability to foster implementation of appropriate NPS MMs and MPs. By providing watershed-specific information, TMDLs will help target specific sources and corresponding corrective measures and will provide a framework for using more stringent approaches that may be necessary to achieve water quality goals and maintain beneficial uses.

#### **D. DOCUMENT ORGANIZATION**

The NPS Implementation Plan activities for each category are listed in subsequent sections of this document (Sections I through VIII). These address the six land use categories of agriculture; forestry; urban; marinas and recreational boating; hydromodification, and wetlands. An additional category is also provided ("Other") for those activities related to sources of NPS pollution not covered by the traditional land use categories (e.g., abandoned mines). In addition, there are many activities that are being implemented by State agencies that address all MMs in all or multiple land use categories, and that provide an overall framework for NPS pollution prevention. These activities are provided in Section I, 'Multiple Land Use Activities'.

These following sections include a discussion that lists the MMs for the category, describes the issues of concern, clarifies their relationship to other State programs, summarizes the NPS Category Objectives, and lists each agencies' activities. The tabular presentation of category activities is a description of agency activities from all 28 agencies that participate in the State NPS Program. The activities in these tables are organized by MM and by NPS Program process element.

As a point of clarification for these activity tables, four of the NPS Program Process Elements, 'Assess', 'Plan', 'Target' and 'Coordinate', have been regrouped into the 'Pre-Implementation' designation for the purposes of this activity listing. Other identified process elements include 'Implement', and 'Track/Monitor', as a logical follow-up to all 'Pre-Implementation' processes.

It is also important to note that these activity listings are the result of 28 different State agencies' "best guess" in terms of what their NPS programs may or may not be able to implement over the next five years. All IACC members that participated in the NPS Implementation Plan development expressed a concern regarding the current fiscal crisis in California. With diminishing resources, programs are being cut and may sustain additional cuts in future years. As such, it is necessary to provide here the disclaimer that all NPS

Program activities can only be implemented as long as staff and resources remain available at their current levels.

Nonetheless, there are 15 major tasks, which are a high a priority for effective implementation of the NPS Program. These tasks are primarily the responsibility of the NPS Programs lead agencies – the SWRCB and CCC. The focus on implementation tracking and reporting to U.S. EPA and the National Oceanic and Atmospheric Administration (NOAA) will begin with these 15 activities when program assessments take place. These tasks are provided in the Table IO-1 below.

**Table 1. Summary of Major Task That the NPS Program Lead Agencies Seek to Complete as of 2008**

Activity Number	Activity Description	Anticipated Completion Date	Land Use Category	Responsible Agency
1	Adapt the Western EMAP Monitoring Project to meet California's NPS Program information needs through the SWAMP.	December 2004	Forestry, Urban, Agriculture	SWRCB
2	Through contract with California State Lands Commission (SLC) and California Department of Parks and Recreation (CDPR) assess and identify State-owned or managed properties that will require NPS implementation efforts.	July 2004	All	SWRCB, DPR, SLC
3	Coordinate with RWQCB5 irrigated agriculture waiver program as a pilot program for implementation of management practices and tracking of MP and monitoring data.	January 2006	Agriculture	SWRCB, RWQCB5
4	Develop a plan to coordinate with federal agencies in NPS Program implementation through the IACC or other effective means	July 2004	All	SWRCB, CCC
5	Develop a plan to coordinate with local agencies in NPS Program implementation through the IACC or other effective means	July 2004	All	SWRCB, CCC
6	Develop a technical assistance manual with guidelines for designing projects to avoid wetlands and riparian areas.	December 2004	Wetlands	SWRCB
7	Establish consistent compliance monitoring criteria for compensatory wetland mitigation projects.	May 2005	Wetlands	SWRCB
8	Establish regional standards for minimum number of sewage disposal facilities per recreational vessel.	June 2008	Marinas and Recreational Boating	SWRCB, RWQCB2, RWQCB4, RWQCB8
9	Complete statewide marinas mapping project to identify environmental services for boaters as a prelude to a needs assessment.	June 2008	Marinas and Recreational Boating	CCC
10	Provide web-based condensed quick reference guide that provides an entry point to information on nonpoint sources in California (NPS Encyclopedia)	December 2003	All	SWRCB
11	Provide an on-line NPS database system that provides a quick reference guide to available MP technologies, effectiveness of techniques in terms of pollutant removal, and a range of expected installation and maintenance costs. (MP Miner)	September 2004	All	SWRCB

Activity Number	Activity Description	Anticipated Completion Date	Land Use Category	Responsible Agency
12	Conduct a geographical evaluation on the MM/MP implementation that has occurred in California and develop a mechanism to continue to monitor and report on this implementation.	June 2008	All	SWRCB
13	Develop a mechanism for transposing water quality assessment information with MM/MP implementation to understand NPS Program effectiveness.	June 2008	All	SWRCB
14	Complete biennial progress reports to U.S.EPA and NOAA, as well as other agencies and the public regarding progress in NPS Program implementation.	December 2005 and December 2007	All	SWRCB, CCC
15	Submit to the Legislature and make available to the public, copies of and a summary of information in all SWRCB and RWQCB reports that contain information related to NPS pollution and that the SWRCB or RWQCB are required to prepare in the previous fiscal year pursuant to CWA sections 303, 305(b), 319 and CZARA section 6217.	August 2003 and annually thereafter	All	SWRCB, CCC, RWQCBs



**SECTION I**  
**FIVE-YEAR IMPLEMENTATION PLAN**  
**ALL OR MULTIPLE LAND USE**  
**July 2003 through June 2008**

There are many activities that take place among State agencies in California that implement Management Measures in all or most of the six basic categories. These activities are generally geared toward the development and implementation of overall programs that will help reduce NPS pollution, which in many instances, impact all or most of the MMs in each land use Category. Examples of these types of programs are the Critical Coastal Area program development and many TMDL development and implementation projects. These activities are guided by the overall objectives for the Five-Year Plan, which are described more completely in the Introduction, and are also listed below.

**A. 2003-2008 IMPLEMENTATION PLAN OBJECTIVES**

The State of California recently undertook a concerted, collaborative process for the development of Category Objectives for the NPS Implementation Plan 2003-2008. Over a period of approximately one year, the Statewide IACC met frequently to consider the missions of each agency relative to nonpoint source pollution; to formulate a means for collaboration, and to set overall objectives for the collaborative process. The results of this effort that will formulate the focus of California relative to NPS pollution prevention programs and guide the progress that will be made over the next five years. These objectives, listed below, are directly addressed by activities provided in Table I.

1. Promote the implementation of MMs and related practices by all levels of water quality managers (federal, State, watershed groups and other stakeholders).
2. Preserve water quality in water bodies that are currently meeting California water quality standards and protect them from future degradation from the impacts of nonpoint source pollution.
3. Promote the implementation of MMs and use of MPs for the NPS component of TMDLs or in 303(d) listed water bodies.
4. Promote better leverage of inter-agency and private entity resources for NPS Programs.

**B. ACTIVITIES ADDRESSING ALL OR MULTIPLE LAND USE CATEGORIES**

Table I, below, lists those activities for the period from July 2003 through June 2008 that specifically address MMs in all or multiple NPS Land Use Categories.

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

**All\_or\_Multiple**

**Management Measure: All All or Multiple Management Measures**

Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Pre-Implementation 10.001	SRWP Monitoring and Toxics Subcommittee	<p><b>Objective:</b> Support the activities of the Sacramento River Watershed Program Monitoring and Toxics Subcommittees.</p> <p><b>Description:</b> Provide organizational and technical assistance to support the activities of the Monitoring and Toxics subcommittees. Participate in quarterly meetings, assist in the development of yearly water quality monitoring plan, review and comment on annual monitoring report. Prepare meeting agendas, attend meetings and provide comments on monitoring plan and reports.</p>	RWQCB-5S	Regionwide RB5	Well-supported SRWP Meetings and other activities.	7/1/03 to 6/30/08
Pre-Implementation 10.002	Clear Lake Nutrient TMDL	<p><b>Objective:</b> Reduce nutrients in Clear Lake.</p> <p><b>Description:</b> Technical TMDL for nutrients for Clear Lake</p>	RWQCB-5S	Lake County	Completion of TMDL	7/1/03 to 1/1/04
Pre-Implementation 10.006	SRWP Public Outreach and Education Subcommittee	<p><b>Objective:</b> Support the Public Outreach and Education Subcommittee of the Sacramento River Watershed Program</p> <p><b>Description:</b> Facilitate the Public Outreach and Education Subcommittee.</p>	RWQCB-5S	Regionwide RB5	Attend and facilitate meetings. Attend education and outreach events. Watershed newsletters	7/1/03 to 6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 10.016	SWAMP - Ambient Monitoring in Lower Sacramento River watersh	<p><b>Objective:</b> Assess chemical water quality, physical habitat conditions and biological communities in priority water bodies.</p> <p><b>Description:</b> Annual monitoring program to assess water quality in selected water bodies within the lower Sacramento river watershed. Priority water bodies and constituents of concern are identified annually. Funding levels vary annually. Funding is through the Surface Water Ambient Monitoring (SWAMP) program.</p>	RWQCB-5S	Regionwide RB5	Completion of annual monitoring plan and monitoring reports.	7/1/03 to	6/30/08
Pre-Implementation 10.023	Cache Creek Mercury TMDL	<p><b>Objective:</b> Reduce mercury in Cache Creek.</p> <p><b>Description:</b> TMDL scheduled to be completed in 2003. Basin Plan Amendment scheduled to go to the Board in 2004. Implementation scheduled to begin in 2006. More information at: <a href="http://www.swrcb.ca.gov/~rwqcb5/programs/tmdl/cache creekhg.html">http://www.swrcb.ca.gov/~rwqcb5/programs/tmdl/cache creekhg.html</a></p>	RWQCB-5S	Lake County	Completed TMDL and Basin Plan Amendment.	7/1/03 to	6/30/08
Pre-Implementation 10.030	Delta Waterways Dissolved Oxygen TMDL	<p><b>Objective:</b> Improved dissolved oxygen situation in the delta waterways.</p> <p><b>Description:</b> TMDL is scheduled to be completed in 2003. The basin plan is scheduled to go to the Board in 2004. Implementation is scheduled to begin in 2004.</p>	RWQCB-5S	Regionwide RB5	Adopted TMDL	7/1/03 to	6/30/08
Pre-Implementation 10.031	Merced River Diazinon and Chlorpyrifos TMDL	<p><b>Objective:</b> Reduce diazinon and chlorpyrifos in the Merced River.</p> <p><b>Description:</b> TMDL is scheduled to be completed in 2005. The basin plan is scheduled to go to the Board in 2006. Implementation is scheduled to begin in 2006.</p>	RWQCB-5S	Regionwide RB5	Adopted TMDL	7/1/03 to	6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 10.032	Stanislaus River Diazinon TMDL	<p><b>Objective:</b> Reduce diazinon in the Stanislaus River.</p> <p><b>Description:</b> TMDL is scheduled to be completed in 2005. The basin plan is scheduled to go to the Board in 2006. Implementation is scheduled to begin in 2006.</p>	RWQCB-5S	Regionwide RB5	Adopted TMDL	7/1/03 to 6/30/08
Pre-Implementation 10.033	Tuolumne River Diazinon TMDL	<p><b>Objective:</b> Reduce diazinon in the Tuolumne River.</p> <p><b>Description:</b> TMDL is scheduled to be completed in 2005. The basin plan is scheduled to go to the Board in 2006. Implementation is scheduled to begin in 2006.</p>	RWQCB-5S	Regionwide RB5	Adopted TMDL	7/1/03 to 6/30/08
Pre-Implementation 10.034	San Joaquin River DDT and Group A Pesticides TMDL	<p><b>Objective:</b> Develop a plan to address DDT/Group A* Pesticides TMDL for the San Joaquin River.</p> <p><b>Description:</b> TMDL is scheduled to be completed in 2004. Basin plan and implementation will not begin until after 2015. *Group A pesticides (aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, hexachlorocyclohexane (including lindane), endosulfan, and toxaphene).</p>	RWQCB-5S	Regionwide RB5	Adopted TMDL	7/1/03 to 6/30/08
Pre-Implementation 10.036	Delta Waterways Diazinon and Chlorpyrifos TMDL	<p><b>Objective:</b> Reduce diazinon and chlorpyrifos in the Delta waterways.</p> <p><b>Description:</b> TMDL is scheduled to be completed in 2003. The basin plan is scheduled to go to the Board in 2004. Implementation is scheduled to begin in 2005.</p>	RWQCB-5S	Regionwide RB5	Adopted TMDL	7/1/03 to 6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 10.075	County of Tuolumne Water Quality Plan	<p><b>Objective:</b> Assess impacts of nonpoint source pollution in the Tuolumne watershed.</p> <p><b>Description:</b> Assess the current status of the Upper Tuolumne River and the Upper Stanislaus River watersheds impacted by growth and development in Tuolumne County; to assess the adequacy of the current County Codes, land use designations, and management practices used by the County to limit impacts to water quality from storm water runoff and nonpoint source pollution; to develop a Water Quality Plan with conditions, mitigating measures or best management practices to be utilized to reduce the impacts to water quality; and to monitor their effectiveness following implementation of the Water Quality Plan, through amendments to the Tuolumne County Ordinance Code.</p>	RWQCB-5S	San Joaquin watershed	Completed assessment	7/1/03 to	6/30/08
Pre-Implementation 10.085	Yuba River Water Quality Monitoring Project	<p><b>Objective:</b> Assess water quality in the south Yuba River</p> <p><b>Description:</b> Citizen monitoring project in the south Yuba River. Monthly monitoring for water quality parameters such as pH, temperature, turbidity, pathogens, etc.</p>	RWQCB-5S	Yuba River watershed	Completed Assessment	7/1/03 to	6/30/08
Pre-Implementation 10.091	Upper Mokelumne River Watershed Assessment	<p><b>Objective:</b> Protection of the beneficial uses of the upper Mokelumne River.</p> <p><b>Description:</b> (1) develop a stakeholder supported watershed assessment methodology; (2) consistent with this methodology, compile existing data needed to conduct the assessment; (3) identify data gaps; and (4) develop a monitoring strategy for filling the data gaps.</p>	RWQCB-5S	Regionwide RB5	Assessment methodology	7/1/03 to	6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 10.093	Clear Lake Watershed Mercury and Nutrient Assessment	<p><b>Objective:</b> Assess mercury and nutrient inputs into Clear Lake.</p> <p><b>Description:</b> Support the mercury TMDL implementation. Monitor mercury and nutrient inputs into Clear Lake. Identify hot spots. Refine loading estimates.</p>	RWQCB-5S	Regionwide RB5	Completed assessment	7/1/03 to	6/30/08
Pre-Implementation 11.1	Upper Owens-Mono Watershed Management Plan	<p><b>Objective:</b> To assess water quality conditions and produce a watershed management plan for the West Walker River watershed</p> <p><b>Description:</b> Assessment, outreach and education, development of a management plan.</p>	RWQCB-6	Mono County	Completed assessment report	1/1/03 to	1/1/05
Pre-Implementation 11.2	West Walker River Watershed Management Plan	<p><b>Objective:</b> To assess water quality conditions and produce a management plan for the West Walker River watershed</p> <p><b>Description:</b> Assessment, outreach and education, development of a watershed management plan.</p>	RWQCB-6	Mono County	completed watershed assessment report	1/1/03 to	1/1/06
Pre-Implementation 11.28	Truckee River TMDL	<p><b>Objective:</b> watershed restoration through the TMDL program</p> <p><b>Description:</b> Complete and implement the TMDL</p>	RWQCB-6	Nevada County	completed TMDL	7/1/03 to	1/1/05
Pre-Implementation 11.29	Crowley Lake TMDL	<p><b>Objective:</b> watershed restoration through the TMDL program</p> <p><b>Description:</b> Complete and implement the TMDL</p>	RWQCB-6	Mono County	completed TMDL	7/1/03 to	1/1/05
Pre-Implementation 11.30	Lake Tahoe TMDL	<p><b>Objective:</b> watershed restoration through the TMDL program</p> <p><b>Description:</b> Complete and implement the TMDL</p>	RWQCB-6	EI Dorado, Nevada, Placer Counties	completed TMDL	1/1/02 to	5/1/07

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 11.4	Upper Carson River Watershed Stream Corridor Assessment	<p><b>Objective:</b> To complete a watershed assessment of East and West Forks Carson River and tributaries</p> <p><b>Description:</b> Fluvial geomorphic assessment, riparian corridor survey and setup of GIS framework/database</p>	RWQCB-6	Alpine County	completed stream corridor condition assessment report and GIS framework/database	9/25/02 to	3/31/05
Pre-Implementation 11.5	Upper Carson River Watershed Monitoring Project	<p><b>Objective:</b> To conduct water quality monitoring in the Upper Carson River Watershed. Data will be used to identify pollution sources and causes</p> <p><b>Description:</b> monitoring</p>	RWQCB-6	Alpine County	completed study report	1/1/03 to	1/1/06
Track/Monitor, Assess, Report 14.011	NPS Grant Contracts Management	<p><b>Objective:</b> To manage Federal 319(h) and State Prop 13 grant contracts</p> <p><b>Description:</b> This activity involves participation in the statewide process of reviewing and selecting the NPS 319(h), 205(j), and Prop 13 grant proposals and managing the selected proposals</p>	RWQCB-7	Regionwide RB7	Completion of contracts' scope of work, budget and deliverables on schedule	7/1/03 to	6/30/08
Pre-Implementation 15.001	Develop TMDLs for CWA 303(d) listed waters	<p><b>Objective:</b> Adopted TMDL according to established schedule; implementation of practices per the TMDL.</p> <p><b>Description:</b> Develop waste load allocations by January 2005 for Newport Bay Watershed, Big Bear Lake Watershed, San Jacinto, and Chino Basin.</p>	RWQCB-8	Newport Bay, Big Bear Lake, San Jacinto, and Chino Basin	Adopted TMDL and Basin Plan Amendment according to established schedule. Ultimate success is implementation of the TMDL.	7/1/03 to	6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 15.005	Coordinate/assist SCCWRP coastal activities.	<p><b>Objective:</b> Coordinate and assist SCCWRP coastal monitoring activities - Coastal monitoring data.</p> <p><b>Description:</b> Coordinate and assist SCCWRP coastal monitoring activities - Coastal monitoring data. Nutrients and organochlorines are two stressors of concern. Successful completion of Prop 13 grant tasks, effective, TMDL contract management (including NPS issues), and successful development of the TMDL will be looked at. Implement efficient oversight of the Prop 13 contract and participate in workgroups to ensure efficient facilitation of research projects and to add scientific input.</p>	RWQCB-8	Southern Coastal areas	Successful completion of Prop 13 contract terms	7/1/03 to 6/30/08
Pre-Implementation 15.006	Review TMDL compliance monitoring data	<p><b>Objective:</b> Review TMDL compliance monitoring data and evaluate TMDL compliance.</p> <p><b>Description:</b> Review TMDL compliance monitoring data and evaluate TMDL compliance.</p>	RWQCB-8	Newport Bay Watershed	Evaluation of compliance	7/1/03 to 6/30/08
Pre-Implementation 15.008	Update Triennial review priority list	<p><b>Objective:</b> Come up with an updated Triennial Review priority list.</p> <p><b>Description:</b> Come up with an updated Triennial Review priority list.</p>	RWQCB-8	Regionwide RB8	Updated Triennial Review priority list.	7/1/03 to 6/30/08
Pre-Implementation 15.010	Develop TMDLs for San Jacinto Watershed	<p><b>Objective:</b> Develop TMDLs for San Jacinto Watershed</p> <p><b>Description:</b> Develop TMDLs for San Jacinto Watershed</p>	RWQCB-8	Regionwide RB8	Completed TMDLs	7/1/03 to 6/30/08
Pre-Implementation 15.016	Develop pesticide runoff management plan	<p><b>Objective:</b> Develop pesticide runoff management plan. To be required by diazinon and chlorpyrifos TMDL</p> <p><b>Description:</b> Develop pesticide runoff management plan. To be required by diazinon and chlorpyrifos TMDL.</p>	RWQCB-8	Newport Bay Watershed	Pesticide runoff management plan.	7/1/03 to 6/30/08



**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 2.606	Bear River watershed 204 grant	<p><b>Objective:</b> To promote and support local watershed groups</p> <p><b>Description:</b> Serve as contract manager for the RCD's prop 204 grant aimed at creating a watershed group and documenting the "health" of the Bear River watershed. Develop an understanding of the current watershed status and steps for remediation.</p>	SWRCB	Nevada and Placer County	Watershed assessment	7/1/03 to	6/30/08
Pre-Implementation 2.713	NPS Program Planning and Interagency Coordination	<p><b>Objective:</b> To facilitate collaborative NPS Program Planning, Implementation, and success tracking in cooperation with multiple State and Federal agencies.</p> <p><b>Description:</b> This activity will include the facilitation of the Interagency Coordinating Committee (IACC), Watershed Management Strategic Planning, USEPA Results workgroup, and other interagency forums to promote the consistency and completeness of Program Plan Implementation for the State of California.</p>	SWRCB	Statewide	Completeness of participation in multiagency efforts, and activities that indicate collaboration.	7/1/03 to	6/30/08
Pre-Implementation 2.716	SWAMP Implementation Plan	<p><b>Objective:</b> To develop a SWAMP Implementation Plan consistent with the USEPA document, 'Elements of an Adequate State Ambient Water Monitoring and Assessment Program'.</p> <p><b>Description:</b> The SWAMP Program of the SWRCB TMDL Unit will prepare a SWAMP implementation plan which will address the ten elements that are described in the USEPA document, 'Elements of an Adequate State Ambient Water Monitoring and Assessment Program.' These elements include 1) Comprehensive monitoring strategy, 2) Monitoring objectives, 3) Monitoring design, 4) Water quality indicators, 5) QA/QC, 6) Data Management, 7) Data analysis and assessment, 8) Reporting, 9) Periodic review of the program and, 10) General support and infrastructure planning.</p>	SWRCB	Statewide	Submittal of SWAMP Implementation Plan to USEPA	7/1/03 to	10/1/03

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 2.718	Biannual Assessment of State Waters	<p><b>Objective:</b> To meet CWA requirements and complete an assessment of the waters of the State of California every two years.</p> <p><b>Description:</b> As required under Section 305(b) of the CWA, the SWRCB will continue to provide USEPA with an overall assessment of the waters of the State every two years. The 305(b) report is due April 1 during even-numbered years. USEPA also requires that the states provide electronic updates of the assessment data (either 305(b) or STORET update) on an annual basis. By 10/1/03, the SWRCB will articulate how this will be accomplished.</p>	SWRCB	Statewide	Completion of 305(b) reports in 2004, 2006 and 2008.	7/1/03 to 6/30/08
Pre-Implementation 2.719	SWAMP Quality Assurance-Quality Control	<p><b>Objective:</b> To ensure that all data that is used in water assessments for the State of California is generated in such a way that data quality is known and useable.</p> <p><b>Description:</b> The SWRCB will continue implementation of statewide water quality monitoring Quality Assurance Program Plan (QAPP). The SWRCB should integrate QA/QC activities initiated under SWAMP into the overall QMP.</p>	SWRCB	Statewide	QAPP implemented	7/1/03 to 6/30/08
Pre-Implementation 2.720	Standardization of Ambient Water Quality Data	<p><b>Objective:</b> To ensure that ambient water quality data is generated and reported in a standardized format to facilitate information exchange.</p> <p><b>Description:</b> The SWRCB will continue the development and implementation of standardized data formats for ambient data that has been initiated under the SWAMP Program. This will facilitate the exchange of information between the SWRCB, RWQCBs, and USEPA and facilitate the compilation of data into a centralized data system envisioned by the State.</p>	SWRCB	Statewide	Completion of standardized data format	7/1/03 to 6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 2.721	Probabilistic Monitoring Pilot Project	<p><b>Objective:</b> To determine the feasibility and benefits of utilizing a probabilistic monitoring program for assessing the quality of waters in the State of California</p> <p><b>Description:</b> USEPA and SWRCB will work to assess the data generated by the EMAP Western Pilot Project since 1999 to test the utility of probabilistic monitoring for coastal marine waters and fresh water stream systems to address the 305(b) reporting needs of the state. USEPA will provide the SWRCB with training and technology transfer. USEPA and SWRCB will investigate potential mechanisms for continuing this effort. To the maximum extent practicable, the EMAP information will be incorporated into the 2004 305(b) report.</p>	SWRCB	Statewide	A complete understanding of the value of Probabilistic Monitoring for California.	7/1/03 to 6/30/08
Pre-Implementation 2.723	Monitoring Needs Assessment	<p><b>Objective:</b> To identify current and future needs to support the overall monitoring and assessment framework</p> <p><b>Description:</b> The SWRCB will identify current and future needs to support the overall monitoring and assessment framework. USEPA and SWRCB will work together to explore how lessons learned in Regional Monitoring efforts from around the state (i.e. SCCWRP, RMP) can be applied to other areas of the State to support monitoring and assessments.</p>	SWRCB	Statewide	Completion of the monitoring needs assessment	7/1/03 to 6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 2.806	319 Grant Fiscal Administration	<p><b>Objective:</b> To secure federal NPS 319 funds and administer them according to all applicable laws, regulations, grant terms, and grant conditions.</p> <p><b>Description:</b> Secure and administer annual 319 NPS Program grants. Coordinate administration within SWRCB, as well as with the RWQCBs, and USEPA, Region 9. Prepare grant application package and develop budgetary documentation. Integrate federal funds with the State budget system, allocating funds to the SWRCB and the RWQCBs. Track personnel and contract expenditures. Deliverable: Annual 319 grant application</p>	SWRCB	Statewide	SWRCB receives the grant award	7/1/03 to 6/30/08
Pre-Implementation 22.002	Monterey Bay Coastal Regional Coordination	<p><b>Objective:</b> Implement marine management plan and develop new WQ management strategies where necessary. Coordinate amongst state and local agency staffs to manage coastal watershed resources.</p> <p><b>Description:</b> Implement developed strategies throughout watersheds draining into the Sanctuary. Outreach to all participating state and local agencies and educate them on the strategies.</p>	CCC	MBNMS and CA Central Coast	Implementation of MMs and improvements in WQ.	7/1/03 to 6/30/08
Pre-Implementation 22.003	Coastal Development Permit and Local Coastal Program Review	<p><b>Objective:</b> Improve LCPs and CDPs to address WQ issues by incorporating the appropriate MMs and BMPs.</p> <p><b>Description:</b> Review CDPs and LCPs before the Commission to ensure the incorporation of appropriate MMs and BMPs. Engage local governments and permit applicants in adopting the necessary measures to incorporate these MMs and BMPs.</p>	CCC	California coast	Incorporation of MMs and BMPs to improve WQ in CDPs and LCPs.	7/1/03 to 6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 22.004	Critical Coastal Areas	<b>Objective:</b> Protect and improve coastal areas of special environmental significance that are impacted or threatened by NPS pollution.	CCC	California coast	Development of plans and successful selection of CCAs for pilot projects. Implementation of MMs in CCAs.	7/1/03 to 6/30/08
		<b>Description:</b> Hold workshops and work with stakeholders to develop watershed assessment of NPS problems near and adjacent to CCAs. Develop and implement action plans to address threats and sources of pollution to CCAs.				
Pre-Implementation 22.008	IACC and its Subcommittees	<b>Objective:</b> Continue to collaborate with the SWRCB in leading the IACC and its subcommittees to implement the state's NPS program.	CCC	Statewide	Regular meetings and agency coordination in implementing the state's NPS program.	7/1/98 to 6/30/08
		<b>Description:</b> Hold regular meetings for IACC and its subcommittees. The specific tasks include preparing agendas, meeting minutes, and other meeting materials. Provide assistance to individual agencies when requested. Collect progress information from IACC agencies in implementation of their five-year plans.				
Pre-Implementation 22.015	Multi-agency and Stakeholder Coordination	<b>Objective:</b> Encourage effective communication and collaborative efforts in NPS pollution prevention and control.	CCC	Statewide	Participation in groups and successful transmission of NPS messages.	7/1/03 to 6/30/08
		<b>Description:</b> Attend regular meetings, roundtables, and workshops with various federal, state (especially RWQCBs), and local agencies, and stakeholder groups. Distribute appropriate NPS messages.				

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 24.002	Sacramento River Watershed Program	<p><b>Objective:</b> Monitor and develop water quality strategies for SRWP</p> <p><b>Description:</b> This project focuses on four area: 1) monitoring the watershed for toxicity, mercury, and drinking water constituents; 2) development of a mercury strategy that dovetails with the CALFED mercury strategy; 3) development of a diazanon management strategy; and 4) development of strategy for unknown toxicity. The area of monitoring is the Sacramento and Feather rivers and their tributaries</p>	CBDA	Sacramento River Watershed	Completed monitoring and strategies	7/1/03 to 6/30/08
Pre-Implementation 24.006	Subcommittee Activities	<p><b>Objective:</b> To acquire stakeholder input regarding the activities of the CBDA Drinking Water Quality Program</p> <p><b>Description:</b> The Subcommittee will focus on three area: 1) A draft Policy Framework on Water Quality, 2) Development of a Strategic Plan for the Drinking Water Quality Program, 3) Resources to carry out the CBDA Drinking Water Quality Program. Two Year 4 Tasks will be 1) Complete the ELPH strategic plan, and 2) Support and provide to the development of the Central Valley drinking water source protection Agency.</p>	CBDA	Bay Delta	Adequate stakeholder input in CBDA Drinking Water Program	7/1/03 to 6/30/08
Pre-Implementation 24.008	Final Assessment (Independent Panel)	<p><b>Objective:</b> To provide an assessment of the effectiveness of ROD activities related to reducing drinking water pollutants of concern.</p> <p><b>Description:</b> This is a Bay Delta Program Record of Decision (ROD) commitment addressing drinking water pollutants of concern, including TOC, bromides, pathogens, salinity, nutrients and turbidity through various activities and programs.</p>	CBDA	Bay Delta	Completion of assessment	7/1/03 to 12/31/07

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Assess 26.001	Response to Spills and Illegal discharges	<p><b>Objective:</b> To identify and investigate incidents of spills and illegal discharges of pollution that impact fish and wildlife resources.</p> <p><b>Description:</b> To respond to spills or discharges that are deleterious to fish, plant life or bird life, to identify responsible party, and to assess damage to natural resources.</p>	DFG	Statewide	Timely response to all reported incidents	7/1/03 to 6/30/08
Assess 26.004	CEQA duties as Trustee or Responsible Agency	<p><b>Objective:</b> To identify and provide recommendations to CEQA lead agencies that will avoid or fully offset all project-induced NPS pollution impacts.</p> <p><b>Description:</b> This activity will include the review of proposed CEQA projects to ensure that there will be no NPS pollution issues impacting California's fish and wildlife resources, and to provide recommendations that will avoid or fully offset all project induced NPS pollution impacts.</p>	DFG	Statewide	Adequate review of all CEQA documents for which DFG is identified as a Responsible Agency	7/1/03 to 6/30/08
Track and Monitor 26.005	CEQA duties as Trustee or Responsible Agency	<p><b>Objective:</b> To ensure adequate follow-up of MM implementation as recommended for CEQA projects.</p> <p><b>Description:</b> This activity will include the tracking and monitoring of projects sites to ensure follow-up of MMs that were recommended by DFG to ensure ensure avoidance of NPS pollution issues impacting California's fish and wildlife resources.</p>	DFG	Statewide	Adequate follow-up of all CEQA projects to ensure implementation of DFG recommended MMs.	7/1/03 to 6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

---

Track and Monitor 26.008	NPS Pollution Prevention of DFG-owned lands	<p><b>Objective:</b> To ensure that MM implementation DFG-owned lands is functioning as adequate pollution prevention measures.</p> <p><b>Description:</b> This activity will include the monitoring of areas where MM implementation has occurred on DFG-owned properties. Special focus will be paid to properties that merit expedited attention, based on their status as either impaired (listed), or pristine water bodies. Evaluations of the success of implementation will be made.</p>	DFG	Statewide	Tracking of all MMs as recommended by Management Plans, and evaluations of their success as pollution prevention measures.	7/1/03 to 6/30/08
-----------------------------	--	--	-----	-----------	--	-------------------



**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 28.001	GIS Data Layer Compilation and Analysis	<p><b>Objective:</b>          To create a database and do analyses of units of the California State Park System, State School Lands and State Sovereign Lands parcels with 303d-listed waterbodies.</p>	DPR	State Park System units, State School Lands & State Sovereign Lands parcels	Complete the compilation and analysis of State Park System units, State School Lands and State Sovereign Lands parcels associated with 303d-listed waterbodies with GIS technology.	7/1/02 to 7/10/03
		<p><b>Description:</b>          Under contract with the California State Lands Commission and the State Water Resources Control Board, compile into ArcView 3.2 Project Files the most current GIS data, including digitized boundary layers of these state lands, together with the 303d list, and other databases deemed useful to do analysis. Prepare a summary of all 303d-listed waters within these state lands boundaries, grouped by Regional Boards delineations that identify current conditions and needs, types of land use, pollutants of interest, pollutant sources, and TMDL priority ranking. From the summary of "high" TMDL priority, create a master list of pertinent information. Analyze and compile information from files, maps, and tables to generate subwatershed boundaries where high priority 303d-listed waterbodies occur on these state lands. From this summary, develop a priority list of where onsite assessments of these state lands will be conducted.</p>				

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 28.002	Watershed Condition Assessment	<p><b>Objective:</b> From field assessments, develop a list of High Priority 303d-listed waterbodies within units of the California State Park System and the State School Lands parcels. Identify general watershed condition to determine potential pollutant sources.</p> <p><b>Description:</b> Under contract with the California State Lands Commission and the State Water Resources Control Board, assess the condition of waterbodies and general condition of watersheds within units of the California State Park System, State School Lands and State Sovereign Lands parcels that are listed as impaired by US EPA. From the assessment, rank importance and need for threatment for those waterbodies on the 303d High Priority list and other conditions that impact water quality.</p>	DPR	State Park System units, State School Lands & State Sovereign Lands parcels	Complete field assessments of State Park System units, State School Lands and State Sovereign Lands parcels associated with the High Priority 303d-listed waterbodies.	7/10/03 to	1/9/04
Pre-Implementation 28.003	Strategic Action Plan	<p><b>Objective:</b> The plan shall assess potential contributing factors to water quality impairments and shall target current and projected land uses and activities that may have contributed, or may contribute in the future, to water quality impairments.</p> <p><b>Description:</b> Using information and reports developed from the GIS Data Layer Compilation and Analysis and the Watershed Condition Assessments, DPR and SLC staff will jointly prepare a Strategic Action Plan that contains recommendations for implementing nonpoint source pollution control management measures and best management practices on lands under their jurisdictions.</p>	DPR	State Park System units, State School Lands & State Sovereign Lands parcels	A Strategic Action Plan will be prepared that guides the implementation of the NPS Program Plan during the second 5-year implementation period.	2/27/04 to	3/31/04

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 28.004	Determine/Develop/Implement Best Management Practices	<p><b>Objective:</b> To implement measures that reduce or eliminate polluted runoff, determine BMPs already in use by other agencies and acceptable to CCC and SWRCB as Program Plan lead agencies, or develop, in collaboration with other agencies, new BMPs that can achieve program goals.</p> <p><b>Description:</b> Research existing BMPs for non-point source pollution control or develop new BMPs. Produce BMP package and distribute to field units. Review BMP package and place on DPR server as shareware resource. Annually review and edit BMP package to reflect objectives and incorporate new strategies, methods and processes. When interacting with field staff, survey employees awareness of BMP package and general knowledge of NPS Program goals.</p>	DPR	State Park System units	BMPs for all Management Measures will be assessed for usefulness and applied where appropriate	2/1/04 to 6/30/08
Pre-Implementation 28.005	Interagency Coordination	<p><b>Objective:</b> Coordinate actions with State and local regulatory agencies and stakeholders on DPR lands for efficiency of plan implementation.</p> <p><b>Description:</b> Participate on committees, attend workshops and symposia, and interact with staffs from other agencies represented on the Interagency Coordinating Committee.</p>	DPR	State Park System units	Planning and implementation of NPS pollution prevention efforts will be enhanced.	7/1/03 to 6/30/08
Pre-Implementation 28.009	Education/Outreach	<p><b>Objective:</b> Use existing or develop new education/outreach programs to help reduce NPS pollution impacting water quality</p> <p><b>Description:</b> Determine education/outreach programs to help reduce and control NPS pollution.</p>	DPR	State Park System units	DPR education/outreach programs will help achieve water quality goods on DPR lands.	7/1/03 to 6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 28.101	Stormwater Phase II MPs	<p><b>Objective:</b> Find and incorporate or create individual MPs for activities at park sites that may impact water through defined stormwater runoff processes.</p> <p><b>Description:</b> Bring together and create MP manual for DPR activities under Phase II Stormwater permit.</p>	DPR	Statewide	Completed Manual available to park units	7/30/03 to 7/30/05
Pre-Implementation 28.120	NPS program identification	<p><b>Objective:</b> Display all program related tasks that are underway or needed to meet the objectives of the NPS program</p> <p><b>Description:</b> Through inspections and published reports identify topics in include in program</p>	DPR	Statewide	Display existing and needed program elements	1/1/03 to 12/30/07
Pre-Implementation 30.001	Manage Contracts to Assess State Lands	<p><b>Objective:</b> Manage and administer interagency contracts with SWRCB and DPR to conduct assessments of State lands.</p> <p><b>Description:</b> Ensure completion of grant tasks.</p>	CSLC	State Lands	100 percent completion of grant tasks.	7/1/02 to 3/31/04
Pre-Implementation 30.002	Interagency Coordination	<p><b>Objective:</b> Seek cooperative partnerships as part of a sustained effort to address potential sources of NPS pollution on or affecting State lands.</p> <p><b>Description:</b> Establish Memoranda of Understanding (MOU) or other Interagency Agreements with other agencies to help CSLC staff address potential sources of NPS pollution on or affecting State lands. Participate in interagency water quality working groups.</p>	CSLC	Statewide lands under the CSLC's jurisdiction	Signed MOU's or Interagency Agreements. A lead CSLC staff person responsible for coordination with the SWRCB and CCC on NPS issues.	7/1/02 to 1/10/03

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 30.003	State Lands GIS Data Layer Compilation and Analysis	<p><b>Objective:</b> Develop watershed-based GIS database and maps to assist CSLC and partner agency staffs in identifying the location of lands, potential sources of NPS pollution.</p> <p><b>Description:</b> 1. Compile into ArcView Project Files GIS data, including digitized boundary layers of State Lands, CCAs, 303d-listed waters, TMDL priorities, and other databases. 2. Summarize all 303d-listed waters within and adjacent to State land boundaries, that identifies lands, types of land uses; pollutants; pollutant sources; and TMDL priority rankings. 3. Create a "master list" of pertinent information . 4. Analyze the compiled information to generalte subwatershed boundaries and identify where high priority 303d listed waters occur on State lands, and develop a prioritized list to conduct onsite assessments.</p>	CSLC	Statewide lands under the CSLC's jurisdiction	GIS data overlays of State lands, CCAs, and 303d-listed waters to identify and prioritize sites .	7/1/02 to 7/10/03
Pre-Implementation 30.004	State Lands Field Assessments	<p><b>Objective:</b> Based on priorities identified in Activity # 30.002, conduct onsite field assessments of State lands to determine if, and to what degree, these lands contribute to water quality impairments.</p> <p><b>Description:</b> 1. Develop plan to conduct field assessments at priority sites; 2. Develop worksheets for field assessments that include information such as presence or absence of BMPs, etc.; 3. Conduct field assessments; 4. Prepare field assessment report.</p>	CSLC	Statewide lands under the CSLC's jurisdiction	Report of field assessment results	7/1/02 to 2/27/04

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 30.005	State Lands NPS Strategic Action Plan	<p><b>Objective:</b> Using information and reports developed in Activiy #s 30.002 &amp; 30.003, prepare a Strategic Action Plan that contains recommendations for implementing NPS management measures and BMPs on State lands.</p>	CSLC	Statewide lands under the CSLC's jurisdiction	Development of Strategic Action Plan that contains recommendations for implementing NPS management measures and BMPs on State lands.	7/1/02 to 3/31/04
		<p><b>Description:</b> Prepare Strategic Action Plan that contains recommendations for implementing NPS management measures and BMPs on State lands.</p>				
Pre-Implementation 30.007	Development of CSLC Water Quality Program	<p><b>Objective:</b> Enhance CSLC staff's ability to address NPS water quality issues as part of staff's core environmental and land management responsibilities.</p>	CSLC	Statewide lands under the CSLC's jurisdiction	Program Intranet site; Improved lease application; Implementation of BMPs through lease terms, coordination with lessees; Staff training.	7/1/03 to 6/30/08
		<p><b>Description:</b> Seek to develop new or improve existing tools that will increase CSLC's awareness of water quality issues and ultimately lead to improved water quality on CSLC lands.</p>				

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 34.002	Drinking Water Source Assessments	<p><b>Objective:</b> Conduct assessments of all 15,000+ public water systems sources (groundwater and surface water) to determine the possible contaminating activities to which each source is most vulnerable.</p> <p><b>Description:</b> Each source is assessed which includes the following steps: 1) GPS the location of the source, 2) Define protection zones around the source, 3) Evaluate physical barrier effectiveness of source and setting to prevent the movement of contaminants, 4) Identify types of possible contaminating activities (PCAs) within protection zones, 5) Rank the PCAs to determine those to which the source is most vulnerable, and 6) Communicate the results to the public.</p>	DHS	Statewide	Complete assessments for all active public drinking water sources.	4/1/99 to 5/31/03
Pre-Implementation 34.003	Develop GIS Map of Water System Sources and Protection Zones	<p><b>Objective:</b> Develop a GIS mapping layer of public water system sources and protection zones.</p> <p><b>Description:</b> Compile GPS source locations and protection zones determined in source water assessments into a GIS layer for the state. Includes groundwater protection zones and watersheds. Use for analysis to identify threats to drinking water sources. Share with other agencies as security concerns permit.</p>	DHS	Statewide	Complete the compilation of the source location and protection zones into one GIS database.	1/1/03 to 12/31/03
Pre-Implementation 34.004	Source Water Protection Loan Program	<p><b>Objective:</b> Support local voluntary drinking water source protection (SWP) efforts by providing low-interest loans to public water systems for source protection projects.</p> <p><b>Description:</b> Provide low-interest loans to public water systems for source water protection (SWP) projects.</p>	DHS	Statewide	Award loans to public water systems for source water protection projects.	7/1/02 to 6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 34.006	Water Quality Monitoring-Commercial Shellfish Growing Areas	<p><b>Objective:</b> Conduct sanitary surveys of all watersheds of all commercial shellfish growing areas to determine the possible impacts to growing areas of all potential sources of pathogens.</p> <p><b>Description:</b> On a monthly basis, water samples are taken from each growing area for fecal coliform concentration measurements to assess the suitability of each area for harvesting of shellfish. In addition, sanitary surveys of all watersheds of all commercial shellfish growing areas are conducted to determine the possible impacts to growing areas of all potential sources of pathogens in the watershed. Complete surveys of all watersheds of all commercial shellfish growing areas, and collect all necessary water samples from all shellfish growing areas.</p>	DHS	Statewide	Completed sampling and surveys.	7/1/03 to 6/30/08
Pre-Implementation 36.001	Review and update BCDC's water quality permit conditions	<p><b>Objective:</b> Determine whether BCDC's existing water quality permit conditions reflect present scientific understanding of NPS and state of the art BMPs.</p> <p><b>Description:</b> Working with RWQCB-2, CCC, and SWRCB staff, prepare revisions to BCDC's permit conditions where needed, and establish a possible program for routine review and update of BCDC's NPS permit conditions. Any additional work after June 2004 is contingent on receiving outside funding.</p>	BCDC	San Francisco Bay	Review of permit conditions completed	7/1/03 to 3/31/04



**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 36.005	Revise NPS attachments to MOU	<p><b>Objective:</b> Assure development of similar or compatible NPS policies and programs; identify roles and responsibilities of agencies in implementing the NPS program.</p> <p><b>Description:</b> Review MOU attachments pertaining to NPS prevention and control and work with partner agencies to revise them in order to reflect the state's NPS Plan goals and BCDC's Bay Plan amendments on water quality. Any additional work performed after June 2004 is contingent on receiving outside funding.</p>	BCDC	San Francisco Bay	Revised MOU attachment	7/1/03 to 12/30/04
Pre-Implementation 36.006	Staff trained on revised permit cond./water quality policies	<p><b>Objective:</b> Provide permit and enforcement staff with guidance on how to implement revised water quality policies and Management Measures.</p> <p><b>Description:</b> Train staff on use of revised permit conditions using existing materials, BMPs and other resources. Any additional work performed after June 2004 is contingent on receiving outside funding.</p>	BCDC	San Francisco Bay	Materials compiled and provided to analysts	12/1/03 to 6/30/04
Pre-Implementation 36.007	Coordination of BCDC and RWQCB Enforcement Processes re. NPS	<p><b>Objective:</b> Identify ways for BCDC and SF Bay RWQCB to collaborate and/or increase coordination when dealing with enforcement cases related to NPS.</p> <p><b>Description:</b> Work with RWQCB enforcement and NPS staff to develop a process for increasing coordination between agencies on enforcement cases involving NPS. Any additional work performed after June 2004 is contingent on receiving outside funding.</p>	BCDC	San Francisco Bay	Process established	1/1/04 to 1/1/05

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 36.008	IACC & Subcommittee/CCA Committee Participation	<p><b>Objective:</b> Collaborate with other agencies involved in NPS prevention and controlefforts; implement Ca.'s NPS Plan</p> <p><b>Description:</b> Actively participate in IACC and subcommittee meetings (i.e. Urban, Marinas, and Hydromodification/Wetlands subcommittees of the IACC) and CCA meetings by reviewing work products, developing workplans and progress reports, and providing input. Any additional work performed after June 2004 is contingent on receiving outside funding.</p>	BCDC	Statewide	Attendance at meetings	7/1/03 to	6/30/08
Pre-Implementation 4.005	Watershed management outreach to stakeholders	<p><b>Objective:</b> To formulate Watershed Management Plans with the stakeholders; to reduce sediment and erosion from agricultural areas, address urban nonpoint source pollution impacts.</p> <p><b>Description:</b> Work with watershed stakeholders throughout region on development of watershed plans, technical assistance</p>	RWQCB-2	Regionwide	Completed watershed plans, provision of technical assistance	7/1/03 to	6/30/08
Pre-Implementation 4.012	ID & Protection of Critical Coastal Areas w/ Wshed Approach	<p><b>Objective:</b> Establish watershed plans in designated Critical Coastal Areas, establishment of stakeholder groups.</p> <p><b>Description:</b> Designate critical coastal areas, establish stakeholder groups and watershed plans</p>	RWQCB-2	Coastside California	Watershed groups established and active; watershed plans developed	7/1/03 to	12/31/04
Pre-Implementation 4.039	TMDL for Pathogens, Lagunitas Creek	<p><b>Objective:</b> Develop TMDL for pathogens</p> <p><b>Description:</b> Develop preliminary and final pathogen TMDL reports, prepare Basin Plan amendment</p>	RWQCB-2	Marin County	Preliminary and final reports, BP amendment	6/30/04 to	6/30/07

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 5.001	Develop/update NPS Implementation Plan	<p><b>Objective:</b> Develop NPS Implementation Plan</p> <p><b>Description:</b> Identify, prioritize and plan NPS implementation actions to be undertaken during the Plan time frame.</p>	RWQCB-3	Regionwide RB3	Complete, practical and effective NPS Implementation Plan	7/1/03 to 6/30/08
Pre-Implementation 5.002	Develop TMDLs & associated implementation plans	<p><b>Objective:</b> Develop TMDLs for 303d listed water bodies (in accordance with TMDL Project Tracking Tool)</p> <p><b>Description:</b> Develop TMDLs and associated implementation plans and supporting documentation (report, Basin Plan amendment, etc) in accordance with TMDL Project Tracking Tool (projects and schedules)</p>	RWQCB-3	Regionwide RB3	Complete TMDLs and implementation plans	7/1/03 to 6/30/08
Pre-Implementation 5.003	Assist watershed mgnt. plan development-Pajaro	<p><b>Objective:</b> Develop comprehensive watershed management plan</p> <p><b>Description:</b> Provide technical assistance in watershed management plan development, review and evaluation.</p>	RWQCB-3	Pajaro River Watershed	Complete watershed management plan	7/1/03 to 6/30/08
Pre-Implementation 5.004	Assist watershed mgnt. plan development-San Benito River	<p><b>Objective:</b> Develop comprehensive watershed management plan</p> <p><b>Description:</b> Provide technical assistance in watershed management plan development, review and evaluation.</p>	RWQCB-3	San Benito River Watershed	Complete watershed management plan	7/1/03 to 6/30/08
Pre-Implementation 5.005	Assist watershed mgnt. plan development-Other NWMA	<p><b>Objective:</b> Develop comprehensive watershed management plan</p> <p><b>Description:</b> Provide technical assistance in watershed management plan development, review and evaluation.</p>	RWQCB-3	Other Northern Watersheds	Complete watershed management plan	7/1/03 to 6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 5.006	Assist watershed mgnt. plan development-San Luis Obispo	<p><b>Objective:</b> Develop comprehensive watershed management plan</p> <p><b>Description:</b> Provide technical assistance in watershed management plan development, review and evaluation.</p>	RWQCB-3	San Luis Obispo Creek Watershed	Complete watershed management plan	7/1/03 to	6/30/08
Pre-Implementation 5.007	Assist watershed mgnt. plan development-Carmel	<p><b>Objective:</b> Develop comprehensive watershed management plan</p> <p><b>Description:</b> Provide technical assistance in watershed management plan development, review and evaluation.</p>	RWQCB-3	Carmel River Watershed	Complete watershed management plan	7/1/03 to	6/30/08
Pre-Implementation 5.008	Assist watershed mgnt. plan development-Arroyo Grande	<p><b>Objective:</b> Develop comprehensive watershed management plan</p> <p><b>Description:</b> Provide technical assistance in watershed management plan development, review and evaluation.</p>	RWQCB-3	Arroyo Grande Creek Watershed	Complete watershed management plan	7/1/03 to	6/30/08
Pre-Implementation 5.009	Assist watershed mgnt. plan development-Other CWMA	<p><b>Objective:</b> Develop comprehensive watershed management plan</p> <p><b>Description:</b> Provide technical assistance in watershed management plan development, review and evaluation.</p>	RWQCB-3	Other Coastal Watersheds	Complete watershed management plan	7/1/03 to	6/30/08
Pre-Implementation 5.010	Assist watershed mgnt. plan development-Santa Maria	<p><b>Objective:</b> Develop comprehensive watershed management plan</p> <p><b>Description:</b> Provide technical assistance in watershed management plan development, review and evaluation.</p>	RWQCB-3	Santa Maria River Watershed	Complete watershed management plan	7/1/03 to	6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 5.011	Assist watershed mgnt. plan development-Santa Ynez	<p><b>Objective:</b> Develop comprehensive watershed management plan</p> <p><b>Description:</b> Provide technical assistance in watershed management plan development, review and evaluation.</p>	RWQCB-3	Santa Ynez River Watershed	Complete watershed management plan	7/1/03 to	6/30/08
Pre-Implementation 5.012	Assist watershed mgnt. plan development-San Antonio	<p><b>Objective:</b> Develop comprehensive watershed management plan</p> <p><b>Description:</b> Provide technical assistance in watershed management plan development, review and evaluation.</p>	RWQCB-3	San Antonio Creek Watershed	Complete watershed management plan	7/1/03 to	6/30/08
Pre-Implementation 5.013	Assist watershed mgnt. plan development-Oso Flaco	<p><b>Objective:</b> To provide technical assistance and to participate in the development of watershed ag working groups to facilitate implementation of regional Ag Water Quality management Plan.</p> <p><b>Description:</b> Provide technical assistance in watershed management plan development, review and evaluation.</p>	RWQCB-3	Oso Flaco Watershed	Complete watershed management plan	7/1/03 to	6/30/08
Pre-Implementation 5.014	Assist watershed mgnt. plan development-South Coast	<p><b>Objective:</b> Develop comprehensive watershed management plan</p> <p><b>Description:</b> Provide technical assistance in watershed management plan development, review and evaluation.</p>	RWQCB-3	South Coast Watershed	Complete watershed management plan	7/1/03 to	6/30/08
Pre-Implementation 5.015	Assist watershed mgnt. plan development-Other SWMA	<p><b>Objective:</b> To provide technical assistance and to participate in development of watershed agriculture working groups to facilitate implementation of regional Ag Water quality Management Plan</p> <p><b>Description:</b> Provide technical assistance in watershed management plan development, review and evaluation.</p>	RWQCB-3	Other Southern Watersheds	Complete watershed management plan	7/1/03 to	6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 5.017	Identify target/high priority non-ag projects	<p><b>Objective:</b> Provide technical assistance and participate in development of watershed Agriculture working groups to facilitate implementation of regional Ag Water Quality Management Plan.</p> <p><b>Description:</b> Evaluate and prioritize proposed projects for resource allocation (staff time and/or grant funding). Identify high priority projects to target for funding opportunities</p>	RWQCB-3	Regionwide RB3	Priority project list	7/1/03 to 6/30/08
Pre-Implementation 5.022	Assist Critical Coastal Areas plan development	<p><b>Objective:</b> Development of Critical Coastal Area plans</p> <p><b>Description:</b> Provide technical assistance in Critical Coastal Area plan development</p>	RWQCB-3	Coastal areas region-wide	Complete Critical Coastal Area plans	7/1/03 to 6/30/08
Pre-Implementation 6.010	Watershed Mgt & Restoration Plan Development for Arroyo Seco	<p><b>Objective:</b> Development of watershed with stream restoration component.</p> <p><b>Description:</b> Develop a watershed plan to protect the Arroyo Seco through stream restoration and by identifying BMPs for future implementation. The plan includes collection of baseline data, stakeholder participation, watershed mapping and analysis.</p>	RWQCB-4	Ventura County	Will be finalized at contract approval time	4/10/02 to 4/30/04
Pre-Implementation 6.036	Bringing the Pieces Together - Ventura River Watershed Plan	<p><b>Objective:</b> Develop a watershed plan for the Ventura River Watershed</p> <p><b>Description:</b> Develop a watershed management plan through a stakeholder-driven process that integrates environmental objectives with economic, social and cultural considerations.</p>	RWQCB-4	Ventura County	Will be finalized at contract approval time	7/1/03 to 6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 6.075	Res. No. 02-016 SEP List - SCCWRP - Dominguez Channel Model	<p><b>Objective:</b> Wet Weather Modeling of the Dominguez Channel Integrated Watershed</p> <p><b>Description:</b> The study will develop a dynamic wet weather runoff model for the Dominguez Channel watershed. The objective of developing the wet weather runoff model is two-fold. The first objective is to evaluate what proportion of the cumulative runoff load of various constituents is generated from specific land uses, sub-watersheds, or municipal entities. The second objective is to create a more sophisticated tool for assessing the effectiveness of different management actions.</p>	RWQCB-4	Los Angeles	Developed model	7/1/03 to 6/30/08
Pre-Implementation 6.076	Res. No. 02-016 SEP List - SCCWRP -Los Angeles River Model	<p><b>Objective:</b> Wet Weather Modeling of the Los Angeles River Integrated Watershed</p> <p><b>Description:</b> The study will develop a dynamic wet weather runoff model for the Los Angeles River watershed. The objective of developing the wet weather runoff model is two-fold. The first objective is to evaluate the proportion of the cumulative runoff load of various constituents generated from specific land uses, sub-watersheds, or municipal entities. The second objective for developing a dynamic water quality model is to create a more sophisticated tool for assessing the effectiveness of different management actions.</p>	RWQCB-4	Los Angeles	Model Evaluation	7/1/03 to 6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 7.003	Local Watershed Support - Organizational Assistance	<p><b>Objective:</b> To support viable local watershed groups working to improve water quality and aquatic habitat in numerous individual watersheds in the region</p> <p><b>Description:</b> Attend organizational meetings, participate on Technical Advisory Committees, and assist in education and outreach activities of the individual groups. Help identify funding sources for continued program support</p>	RWQCB-5	Central Valley	Viable, local watershed groups	7/1/03 to	6/30/08
Pre-Implementation 7.007	Local Watershed Support - Watershed Assessments	<p><b>Objective:</b> Assess watersheds in the Central Valley</p> <p><b>Description:</b> Attend meetings, review plans, provide technical assistance. Assist local watershed groups in identifying the proper scope of a watershed assessment and help them find funding support</p>	RWQCB-5	Central Valley	Assistance provided for developing watershed plans.	7/1/03 to	6/30/08
Pre-Implementation 7.009	Assist in Request for Proposal (RFP) Process	<p><b>Objective:</b> Provide funding for projects that address Regional Board priorities</p> <p><b>Description:</b> Work with watershed groups, local government organizations, and other eligible proponents to solicit grant proposals that implement NPS projects. Work with other Regional Board staff to develop a list of Regional Board priorities for NPS grant-funded projects. Communicate Regional Board priorities and grant program requirements to potential applicants. Provide assistance to applicants as they develop their proposals.</p>	RWQCB-5	Central Valley	List of Regional Board priorities prepared and priority projects funded	7/1/03 to	6/30/08



**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 7.017	Identify impaired water bodies in Central Valley region	<p><b>Objective:</b> Identify waterbodies that do not meet, or are not expected to meet, water quality standards, or are considered impaired. These waterbodies are prioritized on the 303(d) list.</p> <p><b>Description:</b> The 303(d) list is reviewed and updated every two years. During each cycle, water quality data are solicited and reviewed by Regional Board staff. Recommendations for updating the 303(d) list are made. The recommendations are sent to State Board for further review.</p>	RWQCB-5	Central Valley	Completion of 303(d) list update.	7/1/03 to	6/30/08
Pre-Implementation 7.018	Local Watershed Support - Watershed Management Strategies	<p><b>Objective:</b> Develop watershed management, watershed assessment plans or strategies for all watersheds in the Central Valley</p> <p><b>Description:</b> Assist local watershed groups in Sacramento, San Joaquin River and Tulare Basin watersheds to prepare a plan or strategy that should include (1) results of the watershed assessment; (2) identification of problems and priorities; (3) identification of appropriate activities or responsibilities for addressing problems; and (4) a continuing process for project implementation, education and outreach for the local watershed.</p>	RWQCB-5	Central Valley	Watershed management strategies for several watersheds.	7/1/03 to	6/30/08
Pre-Implementation 8.003	Cantua Salt Creek CRMP	<p><b>Objective:</b> Support the activities of the Cantua Salt Creek CRMP</p> <p><b>Description:</b> Provide technical assistance to support activities of the Cantua Salt Creek CRMP. Participate in regular meetings, assist in development of watershed assessment, monitoring and implementation projects.</p>	RWQCB-5F	Cantua-Salt Creek Watershed	attend meetings provide comments on various projects related to watershed assessment and enhancement	7/1/03 to	6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 8.006	Sierra Foothill Conservancy/Millerton Area Watershed Coaliti	<p><b>Objective:</b> Provide technical assistance in the development of a watershed assessment for the Finegold Creek Watershed</p> <p><b>Description:</b> Provide tehcnical assistance in the development of a watershed assessment for the Finegold Creek Watershed.</p>	RWQCB-5F	Eastern Madera County	Completion of the watershed assessment	12/31/03 to 12/31/05
Pre-Implementation 8.008	Panoche Creek Sediment TMDL	<p><b>Objective:</b> Begin sediment TMDL development</p> <p><b>Description:</b> Sediment TMDL development to begin 2004. Basin Plan amendment to be part of next 5 year plan</p>	RWQCB-5F	Panoche Creek	TMDL stakeholder group development and monitoring	7/1/03 to 6/30/08
Pre-Implementation 8.009	Panoche Creek Selenium TMDL	<p><b>Objective:</b> Begin selenium TMDL development 2004</p> <p><b>Description:</b> Begin selenium TMDL development in 2004. Basin Plan amendment will be during next 5 year plan.</p>	RWQCB-5F	Panoche Creek	TMDL stakeholder group development and monitoring	7/1/03 to 6/30/08
Pre-Implementation 8.014	SWAMP - Ambient Monitoring in the Tulare Lake Basin	<p><b>Objective:</b> Assess chemical water quality, physical habitat conditions and biological communities in priority wate bodies</p> <p><b>Description:</b> Annual monitoring program to assess water quality in selected water bodies within the Tulare Lake Basin. Priority water bodies and constituents of concern are identified annually. Funding levels vary annually. Funding is through the Surface Water Ambient Monitoring Program (SWAMP).</p>	RWQCB-5F	Tulare Lake Basin	Completion of annual monitoring plan and monitoring reports	7/1/03 to 6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 9.001	Butte County Integrated Watershed Coordination	<p><b>Objective:</b> Increase coordination and information sharing among watershed groups, agencies, and Butte County.</p> <p><b>Description:</b> Outreach, coordination, information exchange, watershed activities documentation, RCD support.</p>	RWQCB-5R	Butte County	Watershed group and RCD success	7/1/03 to	6/10/04
Pre-Implementation 9.003	Sulphur Creek Watershed Assessment and Restoration Strategy	<p><b>Objective:</b> To conduct a watershed assessment for Sulphur Creek, develop a list of prioritized restoration activities, and establish a watershed monitoring program</p> <p><b>Description:</b> Conduct assessment, develop restoration priorities list, implement monitoring</p>	RWQCB-5R	Sulphur Creek Watershed	Complete assessment, restoration priorities list, monitoring	7/1/03 to	6/30/08
Pre-Implementation 9.011	SWAMP - Ambient Monitoring of Lake Siskiyou Tributaries	<p><b>Objective:</b> Assess chemical water quality, physical habitat conditions and biological communities in tributaries to Lake Siskiyou.</p> <p><b>Description:</b> Conduct ambient surface water monitoring to assess water quality of three streams that drain an increasingly urbanized watershed of the upper Sacramento River.</p>	RWQCB-5R	Upper Sacramento River watershed	Completion of monitoring.	7/1/03 to	6/30/08
Pre-Implementation 9.013	Water Quality Improvement in Cow Creek watershed	<p><b>Objective:</b> Identify and reduce sources of elevated ecoli and water temperatures in Cow Creek.</p> <p><b>Description:</b> Sampling and development of an implementation plan.</p>	RWQCB-5R	Eastern Shasta county	assessment	7/1/03 to	6/30/08
Pre-Implementation 9.014	Tehama West Watershed Assessment	<p><b>Objective:</b> To complete a watershed assessment for Tehama West Watershed</p> <p><b>Description:</b> Development of a watershed assessment</p>	RWQCB-5R	Western Tehama County	completion of assessment	7/1/03 to	6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 9.015	Bear Creek Watershed Assessment	<p><b>Objective:</b> To conduct a watershed assessment in Bear Creek Watershed.</p> <p><b>Description:</b> Conduct a watershed assessment</p>	RWQCB-5R	south eastern shasta co.	generate a watershed assessment	7/1/03 to	6/30/08
Pre-Implementation 9.016	Cottonwood Creek Watershed Management Plan	<p><b>Objective:</b> To Develop a Watershed Management Plan for Cotton Wood Creek.</p> <p><b>Description:</b> Develop a watershed management plan</p>	RWQCB-5R	Northwestern Tehama Co. and south western Shasta County	Completed Watershed Management Plan	7/1/03 to	6/30/08
Pre-Implementation 9.018	Stony Creek Watershed Management Program	<p><b>Objective:</b> Support development of a watershed management program for Stony Creek</p> <p><b>Description:</b> Develop a watershed management program</p>	RWQCB-5R	Glenn County	A completed watershed management program.	7/1/03 to	6/30/08
Pre-Implementation 11.3	Middle Truckee River Watershed Management Plan	<p><b>Objective:</b> To assess water quality conditions and produce a watershed management plan for the middle reach of the Truckee River.</p> <p><b>Description:</b> Assess and develop a watershed plan</p>	RWQCB-6	Nevada County	Completed watershed plan	1/1/03 to	1/2/06
Pre-Implementation 16.103	Rainbow Creek Nutrient TMDL Development	<p><b>Objective:</b> To develop the Rainbow Creek Nutrient TMDL.</p> <p><b>Description:</b> To complete the Rainbow Creek TMDL, and Basin Plan Amendment, acquire approval of both by RWQCB and SWRCB, as well as USEPA.</p>	RWQCB-9	HU 902	Completed TMDL	7/1/03 to	6/3/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 16.701	CEQA, NEPA Project Review	<p><b>Objective:</b> To actively participate in CEQA, NEPA and land use planning processes.</p> <p><b>Description:</b> Provide active participation in CEQA, NEPA and land-use planning processes; review and comment on all CEQA, NEPA, and land use planning documents.</p>	RWQCB-9	Regionwide - Region 9	Land development is performed in a manner that is protective of water quality and beneficial uses.	7/1/03 to 6/30/08
Pre-Implementation 16.801	Grant Program Development	<p><b>Objective:</b> To improve the SWRCB and RWQCB project funding programs.</p> <p><b>Description:</b> To coordinate with the SWRCB and other RWQCBs in the replacement of existing SWRCB-centered grant programs with collaborative, regionally-based programs.</p>	RWQCB-9	Regionwide - Region 9	Effective grant programs that have reasonable amount of Regional Board control of program funding.	7/1/03 to 6/30/08
Pre-Implementation 16.802	Grant Project Prioritization	<p><b>Objective:</b> To identify and nurture proposed projects that would be most beneficial to NPS pollution prevention.</p> <p><b>Description:</b> To coordinate with local agencies and the general public regarding NPS projects that merit financial support through State grant programs.</p>	RWQCB-9	Regionwide - Region 9	Good quality projects that receive funding.	7/1/03 to 6/30/08
Pre-Implementation 16.803	Grant Project Selection	<p><b>Objective:</b> To select NPS projects for funding that would be the most beneficial to the NPS Program in Region 9.</p> <p><b>Description:</b> Actively participate in the review, scoring, ranking and recommending of projects that have been proposed for financial assistance.</p>	RWQCB-9	Regionwide - Region 9	Projects that are the most beneficial for NPS pollution prevention in Region 9 would receive funding	7/1/03 to 6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 2.714	Coordination of TMDL Implementation Plans with NPS Program	<p><b>Objective:</b> To ensure consistent utilization of NPS Management Measures and MP effectiveness reporting throughout TMDL Implementation process.</p> <p><b>Description:</b> To continue to work with the RWQCB TMDL staff to maintain a consistent communication process during the critical stages of TMDL Implementation Plan development. Part of this liaison effort will include participation in the TMDL Roundtable, Implementation Workgroups, and in providing an emphasis on TMDLs and 303(d) listed waterbodies in 5-year plan implementation.</p>	SWRCB	Statewide	Fully developed TMDL Implementation Plans which utilize NPS MMs and report on MP effectiveness.	7/1/03 to 6/30/08
Pre-Implementation 2.715	Land Assessment of Impaired Waters for SLC and DPR	<p><b>Objective:</b> To manage State contract designed to identify and characterize SLC and DPR lands that are TMDL listed or not meeting water quality standards due to NPS pollution.</p> <p><b>Description:</b> Management of the contract for California State Lands Commission and California Dept. of Parks and Recreation which will fund the characterization of these state lands.</p>	SWRCB	Statewide	Complete characterization of CSL and DPR lands as it relates to NPS pollution from land use activities.	7/1/03 to 6/30/08
Pre-Implementation 2.756	NPS Load Estimation Tools	<p><b>Objective:</b> To provide estimates of potential loads from major sources types and expected load reductions from installation of MPs.</p> <p><b>Description:</b> NPS Load Estimation Tools will be developed, specific to California, to provide quick estimates of the potential load from major source types and the type of load reduction that can be expected from the installation of MPs.</p>	SWRCB	Statewide	NPS Load Estimation Tools are developed and made available on SWRCB Website.	1/1/03 to 6/30/04

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 2.757	NPS Program Implementation and Enforcement Policy Development	<p><b>Objective:</b> To provide information that will assist the SWRCB and RWQCBs in enforcement of NPS water quality control requirements.</p> <p><b>Description:</b> The NPS Implementation and Enforcement Policy will explain how the Porter-Cologne Act mandates and authorities, including WDRs, waivers, and Basin Plan Prohibitions will be used to implement and enforce the NPS Program Plan. The Policy has been drafted, and needs to be finalized through the appropriate administrative and legal processes at the SWRCB.</p>	SWRCB	Statewide	Completion of an approved Policy	1/1/02 to	1/1/04
Pre-Implementation 26.006	NPS Pollution Prevention of DFG-owned lands	<p><b>Objective:</b> To ensure that activities on DFG-owned lands do not contribute to NPS pollution</p> <p><b>Description:</b> This activity will include the development of written management plans for all DFG-owned properties. Management plans will include a section that addresses the NPS pollution issues, and a determination will be made if ongoing pollution problems currently exist. There will also be an evaluation made between those identified NPS pollution problem sites and water bodies that merit expedited attention, based on their status as either impaired (listed), or pristine water bodies. Effective MMs will be recommended to address these identified problems.</p>	DFG	Statewide	Development of NPS-related information in Management Plans for all DFG-owned lands.	7/1/03 to	6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 10.008	Lower Sacramento River Citizen-based BMP Implementation	<p><b>Objective:</b> Implementation of BMP's and stream restoration measures to address NPS pollution from erosion, ORV use, and invasive species in watersheds located in the lower Sacramento River watershed.</p> <p><b>Description:</b> This project consists of activities conducted by four watershed groups. 1) Invasive Species mapping and eradication (Upper Putah Creek); 2) Implement BMP's for erosion control (Upper Cache Creek); 3) ORV exclusion (Dry Creek); 4) Stream restoration workshops (American River); 5) Bioassessment Workshops (Sustainable Lands Stewardship Institute)</p>	RWQCB-5S	Regionwide RB5	Implementation of BMP's, effectiveness monitoring, and invasive species mapping and eradication	9/1/03 to	9/1/06
Implement 10.092	South Yuba Watershed Project	<p><b>Objective:</b> Improve water quality in the south Yuba River.</p> <p><b>Description:</b> Facilitate locally generated, working landscape objectives in the SYW consistent with watershed health objectives (recreation/visitor services, biomass, cottage industry, hydroelectric projects and value added forest products)</p>	RWQCB-5S	Regionwide RB5	Landscape objectives	7/1/03 to	6/30/08
Implement 11.11	Truckee River Habitat Restoration and Education	<p><b>Objective:</b> To improve and restore water quality and beneficial uses through instream restoration projects and education/outreach.</p> <p><b>Description:</b> Instream restoration, education and outreach, community events.</p>	RWQCB-6	Nevada County	Completed restoration projects and community events.	8/20/99 to	12/1/03
Implement 11.12	Trout Creek Restoration	<p><b>Objective:</b> To improve and restore water quality and beneficial uses of Trout Creek</p> <p><b>Description:</b> Restoration work on Trout creek.</p>	RWQCB-6	Nevada County	Completed restoration	5/1/01 to	6/30/04



**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 11.13	Truckee River Citizens' Monitoring	<p><b>Objective:</b> To improve watershed conditions</p> <p><b>Description:</b> To implement restoration projects, conduct water quality monitoring, educate the public on water quality.</p>	RWQCB-6	Nevada County	Completed restoration projects, data; completed outreach event.	6/1/02 to	6/30/05
Implement 11.15	Restoration of Riparian Habitat at Crowley Lake	<p><b>Objective:</b> To restore riparian habitat at Crowley Lake and to assess effectiveness of restoration</p> <p><b>Description:</b> Implement BMPs to restore habitat and assess effectiveness of restoration, outreach and education, construction of BMPs such as fencing, road/parking lot closures, directed access, public information meetings</p>	RWQCB-6	Mono County	Implemented BMPs	5/1/00 to	3/1/03
Implement 11.16	Clean Sierra Waters NPS Control Project	<p><b>Objective:</b> To protect and restore Sierra Nevada waters through education, outreach, and restoration.</p> <p><b>Description:</b> construct demonstration restoration projects, provide seed funding for watershed groups, conduct presentation on watershed management and TMDLs, completion of restoration projects, establishment of new watershed groups, completion of presentations</p>	RWQCB-6	Sierra Nevada Mountains	Restored waters, established watershed groups.	7/1/02 to	6/30/05
Implement 11.17	NPS Prevention Through Public Education&Implement.Of BMPs	<p><b>Objective:</b> Facilitate implementation of BMPs on Private Properties</p> <p><b>Description:</b> Educate property owners on importance of BMPs and provide technical assistance on implementation of BMPs.</p>	RWQCB-6	EI Dorado County	Installed BMPs; improved water quality	12/1/02 to	6/30/05

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 11.18	Adopt a Watershed for Tahoe/Truckee	<p><b>Objective:</b> Enhance communities' ability to create long term improvements in water quality</p> <p><b>Description:</b> Provide community support, in-depth training in watershed education for teachers, establishment of a community/school partnership structure and training for watershed groups.</p>	RWQCB-6SLT	El Dorado, Nevada, Placer Counties	Effective watershed teams	7/1/02 to	3/31/05
Implement 11.51	River Day	<p><b>Objective:</b> To promote watershed protection through education.</p> <p><b>Description:</b> Educate third graders about water quality in the Upper Truckee River.</p>	RWQCB-6	El Dorado County	Completed extent on an annual basis.	7/1/03 to	6/30/08
Implement 11.54	Coastal Cleanup Day	<p><b>Objective:</b> To prevent water pollution from trash; also promote watershed protection and the idea of TIMBY (Tahoe is my backyard)</p> <p><b>Description:</b> Adopt a section of beach or reach of river to remove trash and survey types removed. Remove trash to protect watershed.</p>	RWQCB-6	El Dorado County	Participation in the event on an annual basis.	7/1/03 to	6/30/08
Implement 11.56	Truckee River Day	<p><b>Objective:</b> To promote watershed protection and restoration</p> <p><b>Description:</b> outreach and education, implementation of demonstration restoration projects</p>	RWQCB-6	Nevada County	Completed community water quality event.	7/1/03 to	6/30/08
Implement 11.57	Earth Day Festival	<p><b>Objective:</b> To promote watershed protection and restoration</p> <p><b>Description:</b> outreach and education</p>	RWQCB-6	Regionwide RB6	Participation on an annual basis.	7/1/03 to	6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 11.58	"Environmentality"Challenge	<p><b>Objective:</b> To promote watershed protection and restoration to elementary school students</p> <p><b>Description:</b> outreach and education</p>	RWQCB-6	El Dorado County	recruitment of a fifth grade class to partipate on an annual basis.	7/1/03 to 6/30/08
Implement 15.002	Participate in watershed awareness activities	<p><b>Objective:</b> Participate in watershed awareness activities.</p> <p><b>Description:</b> Public awareness; Participate in watershed awareness activities.</p>	RWQCB-8	Regionwide RB8	Public awareness; Participation in watershed awareness activities.	7/1/03 to 6/30/08
Implement 15.014	Implement nutrient management plans	<p><b>Objective:</b> To reduce nutrient loadings in Newport Bay Watershed</p> <p><b>Description:</b> Implement nutrient management plans</p>	RWQCB-8	Newport Bay Watershed	Nutrient management plans	7/1/03 to 6/30/08
Implement 15.017	Implement Pesticide Runoff Management Plan	<p><b>Objective:</b> Reduction of pesticide use that impacts Newport Bay watershed.</p> <p><b>Description:</b> To be required as of diazinon and chlorpyrifos TMDL - we could use funding to implement the following: 1. Runoff monitoring (no exceedances) 2. Usage Analysis (declining usage trends for pesticides that are water quality problems). 3. BMP Implementation (installation of physical BMPs e.g. filter strips) 4. Education/outreach (review and improve effectiveness of Integrated Pest Management - IPM - and County Programs.</p>	RWQCB-8	Newport Bay Watershed	1. no exceedances 2. declining usage trends for pesticides 3. physical BMPs installed 4. improved effectiveness of IPM and County Programs.	7/1/03 to 6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 16.104	Rainbow Creek Nutrient TMDL Implementation	<p><b>Objective:</b> To implement the Rainbow Creek Nutrient TMDL.</p> <p><b>Description:</b> To perform the coordination and enforcement efforts necessary to implement the TMDL.</p>	RWQCB-9	HU 902	Restoration of beneficial uses and water quality objectives in Rainbow Creek	7/1/03 to 6/30/08
Implement 16.603	California Caulerpa Action Team	<p><b>Objective:</b> To actively participate in Southern California Caulerpa Action Team</p> <p><b>Description:</b> Active participation in Southern California Caulerpa Action Team.</p>	RWQCB-9	Region 9 Coastal Waters	Complete participation in Action Team events.	7/1/03 to 6/30/08
Implement 16.702	Watershed Group Support	<p><b>Objective:</b> To provide support that will promote effective watershed groups and watershed planning efforts.</p> <p><b>Description:</b> Active outreach and participation in watershed groups and watershed protection planning efforts. Provide technical support, where necessary.</p>	RWQCB-9	Regionwide - Region 9	Active, effective, and respected watershed groups. Commitment to watershed protection by the public and decision makers.	7/1/03 to 6/30/08
Implement 16.804	Grant Project Oversight	<p><b>Objective:</b> To oversee and participate in projects that have been funded</p> <p><b>Description:</b> Identify funded projects, and project managers. Coordinate efforts and provide support to ensure successful completion of the projects.</p>	RWQCB-9	Regionwide - Region 9	Successful project completion.	7/1/03 to 6/30/08
Implement 18.003	Revise groundwater protection program	<p><b>Objective:</b> Adopt new regulations that will make the program more preventive rather than reactive</p> <p><b>Description:</b> Rulemaking</p>	CDPR	Statewide	Adoption of new regulations	3/1/03 to 12/31/03

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 18.015	Pesticide Detection Response	<p><b>Objective:</b> In cooperation with the SWRCB and RWQCB, to evaluate specific problems and determine the need for and degree of mitigation measures</p> <p><b>Description:</b> Evaluate situation, determine if water quality standards are being violated, assess regulatory and non-regulatory options for mitigation; implement as appropriate</p>	CDPR	Statewide	Successful implementation of mitigation measures	7/1/03 to 6/30/08
Implement 2.700	Coastal Commission 319 Contract	<p><b>Objective:</b> To manage 319 contracts with the CCC for co-management of the California Nonpoint Source Program Plan</p> <p><b>Description:</b> To manage contract with the CCC to include Scope of Work, budget, completion of tasks and deliverables. The 319 contract to CCC provides funding to continue activities required to implement the NPS Program Plan. Tasks include NPS Program Implementation and Coordination, Targeted Outreach to Local Governments and Communities, CDPs, LCPs and other CCC Planner Assistance, Model Urban Runoff Program (MURP), and Project Management and Administration.</p>	SWRCB	Coastal Zone	Completion of contract tasks and deliverables	7/1/03 to 6/30/08
Implement 2.701	Snapshot Day 2003 319(h) Contract Management & Monitoring Support	<p><b>Objective:</b> To manage 319(h) contract for Coastal Snapshot Monitoring Day 2003.</p> <p><b>Description:</b> To manage contract for Coastal Snapshot Monitoring Day 2003 and provide technical support. The Snapshot Day 319(h) contract is designed to expand Snapshot Monitoring beyond the Monterey Bay Marine Sanctuary waters to include rivers and creeks along the entire coast of California. It is also intended to involve coastal citizen groups in the October National Monitoring Day.</p>	SWRCB	California Coast	Completion of contract tasks and deliverables	7/1/03 to 11/30/03

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 2.707	NPS Program Plan Implementation, Tracking and Enforcement	<p><b>Objective:</b> To facilitate a Land Use Category Communications network related to implementation of NPS Program Plan for California</p> <p><b>Description:</b> Management of California's NPS Program Plan and Implementation, including coordination with other SWRCB programs, including Storm Water, Surface Water Ambient Monitoring Program, Abandoned Mines, and 401 Certification Program.)</p>	SWRCB	Statewide	A well-facilitated internal communications network for NPS Program	7/1/03 to 6/30/08
Implement 2.708	Clean Water Team Program's Citizen Monitoring, Eduation & Outreach	<p><b>Objective:</b> To expand and promote community-based watershed monitoring and improve usefulness of their efforts for watershed management planning to include the 305(b) report, 303(d) list, and TMDL development.</p> <p><b>Description:</b> Clean Water Team (CWT) will provide technical and organizational support to community-based watershed monitoring programs to include: maintain the CWT contact list; keep information flowing through the CWT website; newsletters; periodic mailings (including email); training workshops; TAC member; coordination of State, national &amp; international monitoring events; monitoring equipment and materials when available.</p>	SWRCB	Statewide	Participation in Community-based groups; WebPages management; well-written and distributed CWT newsletter; development of monitoring materials; presentations and promotion of groups in public forums.	7/1/03 to 6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 2.709	NPS Web Site Coordination	<p><b>Objective:</b> To provide NPS information on SWRCB website and to provide information clearing house functions.</p> <p><b>Description:</b> The NPS web site provides public access to NPS pollution prevention methods, management practices for discharger groups, technology, funding information for watershed management, pollution prevention, water education, environmental justice and other NPS-related projects. The web site also provides access to NPS staff for technical assistance and educational materials. Information is available to both the regulated community and the general public. This task remains our primary public outreach tool and implements the public participation component of the NPS Program Plan.</p>	SWRCB	Statewide	Up-to-date topics listed regarding NPS Program on SWRCB website	6/1/03 to 6/30/08
Implement 2.711	Watershed Management Initiative (WMI)	<p><b>Objective:</b> To coordinate the WMI with State and Regional Boards on a watershed basis as they provide water resource protection, enhancement, and restoration while balancing economic and environmental impacts.</p> <p><b>Description:</b> The WMI is managed uses a watershed planning approach, designed to integrate various surface and groundwater regulatory and non-regulatory (e.g. grant funding) programs while promoting cooperative and collaborative efforts within watersheds. Target watersheds are identified and prioritized by the Regional Boards, according to the water quality conditions of each. Unique solutions are developed for each watershed that consider all local conditions and pollution sources and rely on the input and involvement of local stakeholders. A key activity is coordinating with other State, federal, and local agencies that have programs that affect the health of watersheds in California.</p>	SWRCB	Statewide	Local watershed management plans, Improved health of watersheds in accordance with the local plan.	7/1/03 to 6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 2.751	Clean Water Team Liaison with RWQCBs and Citizen Monitoring Groups	<p><b>Objective:</b> To promote partnerships between and amongst citizen monitors, non-government organizations, educators and agencies to promote better watershed protection.</p> <p><b>Description:</b> Create and foster partnerships and collaboration, identify and coordinate with other water monitoring trainers, provide technical liaison in grant contracts, educate RB staff and other agencies about the benefits of citizen monitoring.</p>		Statewide	Communication, training, and liaison activities.	7/1/03 to 6/30/08
Implement 2.754	California NPS Encyclopedia	<p><b>Objective:</b> To provide a central resource for technical information NPS management practices in California.</p> <p><b>Description:</b> The California Encyclopedia will provide an overview of NPS management in California; discuss each of the six source categories and associated management measures, practices, and applicability to CA regions; describe techniques used to analyze management practice effectiveness, source loading, and management costs; and provide key contact information, references and resources.</p>	SWRCB	Statewide	Encyclopedia is available to interested parties on the SWRCB Website.	1/1/03 to 11/30/03
Implement 2.755	NPS MP Database	<p><b>Objective:</b> To provide a guide to available management practice technologies</p> <p><b>Description:</b> The NPS database will be a database system that provides a quick reference guide to available management practice technologies, the effectiveness of techniques in terms of pollutant removal, and the range of expected installation and maintenance costs.</p>	SWRCB	Statewide	NPS Database is developed, populated with data, and is available on SWRCB website.	1/1/03 to 6/30/04



**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 2.800	Statewide NPS Program Management	<p><b>Objective:</b> To provide administrative and technical support for the SWRCB and RWQCBs in order to build a cohesive statewide NPS program and achieve the goals of the NPS Program Plan.</p> <p><b>Description:</b> Develop annual 319 workplans, administer the 319 and State funded grant programs, produce reports on 319 outputs and program expenditures to USEPA, provide technical and program support through round tables, and ensure workplan products are completed. Deliverable: Consolidated semi-annual 319 progress reports and annual 319 workplans</p>	SWRCB	Statewide	Timely submittal from all organizations	7/1/03 to	6/30/08
Implement 2.803	Consolidated Grants Program	<p><b>Objective:</b> To provide NPS program support through increased communication, planning, and efficient management of grant funding cycles.</p> <p><b>Description:</b> To develop consolidated Request for Concept Proposals and Full Proposals (RFCP/RFFP) for both state and federal funding in implementing nonpoint source projects, to develop public workshops associated with such requests, and to coordinate such efforts with RWQCBs and USEPA, the California Watershed Council (CWC) and other partner agencies in meeting obligations under the NPS Program Plan and Watershed Management Initiative (WMI) Chapters.</p>	SWRCB	Statewide	Development of RFCP and RFFPs consistent with NPS, WMI, and CWC.	7/1/03 to	6/30/08
Implement 2.804	State NPS Bond Fiscal Administration Management	<p><b>Objective:</b> To administer State NPS bond funds according to all applicable laws, regulations, grant terms, and grant conditions.</p> <p><b>Description:</b> Coordinate administration in SWRCB as well as with RWQCBs. Develop budgetary documentation. Allocate funds to the SWRCB organizations and the RWQCBs. Track personnel and contract expenditures.</p>	SWRCB	Statewide	Effective and timely administrative processes.	7/1/03 to	6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 2.807	Grant Award Project Management and Contract Development	<p><b>Objective:</b> To ensure the successful completion of high quality projects, the quick development of contracts, auditable contract files, and documentation of project success. To ensure adequate and accountable cash flow and accurate annual fiscal reporting to Congress, the Legislature, and the public as applicable.</p> <p><b>Description:</b> Provide statewide support for all 319 and State bond fund contractors and contract managers. As part of this support, develop and distribute all timelines necessary for the contract process, review and comment on contract scopes of work and budgets, and work with the contractors and contract managers to negotiate contracts.</p>	SWRCB	Statewide	Executed contracts	7/1/03 to 6/30/08
Implement 2.809	Nonpoint Source State Revolving Fund Loan Program	<p><b>Objective:</b> To administer a statewide loan program that allows for habitat and watershed protection, and provides funding for stormwater, dairy, septic, and agricultural related projects.</p> <p><b>Description:</b> Manage a continuous statewide revolving loan program to supplement NPS grant programs and activities. Coordinate project implementation with the RWQCBs. Assist in preparation of scopes of work and develop budgetary documentation. Apply for federal capitalization funds to increase funding availability.</p>	Statewide	Completion of contract tasks and deliverables	7/1/03 to 6/30/08	

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 2.811	Nonpoint Source Newsletter 319 Contract Management	<p><b>Objective:</b> to produce a publication devoted to California's management of NPS pollution and encourage implementation of NPS management measures while increasing collaboration and cooperation opportunities for water resource managers in the state.</p> <p><b>Description:</b> Manage a statewide 319 contract (\$181,200): The Runoff Rundown: A Catalog of California's Nonpoint Source Management Activities/Water Education Foundation (WEF). Work with the contractor and SWRCB program analyst in developing a scope of work and budget based on the proposal submitted for 2003 319 funds so a contract can be finalized. Provide oversight on the project, receive quarterly progress reports and contract deliverables, and process invoices for work completed.</p>	SWRCB	Statewide	Completion of contract tasks and deliverables.	7/1/03 to 12/31/06
Implement 22.006	Internal Staff Training	<p><b>Objective:</b> Increase staff's knowledge of NPS pollution and the appropriate MMs and BMPs for addressing the issue. Ensure consistent application and requirements of MMs and BMPs in Coastal Commission activities.</p> <p><b>Description:</b> Hold internal staff training workshops and develop education materials for dissemination.</p>	CCC	California coast	Development of training and education materials and workshops.	7/1/03 to 6/30/08
Implement 22.018	Web-based NPS Information	<p><b>Objective:</b> Provide easy, convenient and quick public access to web-based NPS information.</p> <p><b>Description:</b> Create and maintain an NPS information clearinghouse that includes information on BMPs, NPS regulations and programs, and the State NPS Program's activities. This also includes information on the Model Urban Runoff Program and Critical Coastal Areas. Provide links to other sites with NPS information. Ensure at a minimum that all IACC agencies' relevant sites are linked.</p>	CCC	Statewide	An user-friendly web site.	7/1/03 to 6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 24.005	Begin Implementation of Source Control Measures	<p><b>Objective:</b> To reduce drinking water pollutants of concern in the Bay Delta.</p> <p><b>Description:</b> This is a Bay-Delta Program Record of Decision Commitment to address drinking water pollutants of concern including TOC, Bromides, pathogens, salinity, nutrients and turbidity through implementation of multiple activities.</p>	CBDA	Bay Delta	Completion of various activities directed toward drinking water pollutant removal.	7/1/03 to	6/30/08
Implement 24.012	State Aqueduct Inflow Monitoring and Assessment	<p><b>Objective:</b> Control of Runoff into the California Aqueduct and South Bay Aqueduct.</p> <p><b>Description:</b> DWR O&amp;M has continued to conduct event based water quality sampling of runoff into the SWP. All activities have been funded through the State Water Project operating fund. DWR will continue to evaluate the threat to water quality from runoff into the SWP. In the case where remedial action is possible to mitigate contamination, these actions will be explored. This is a Multi-year task for Years 4-7. The Year 4 Tasks include continued monitoring of event-based runoff into the aqueduct.</p>	CBDA	Bay Delta	Controlled runoff	7/1/03 to	6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 24.013	Arroyo Pasajero Contamination Prevention	<p><b>Objective:</b> Implement appropriate physical modifications and watershed programs to prevent contamination from storm water runoff and agricultural drainage.</p> <p><b>Description:</b> Initiate comprehensive evaluation of necessary physical modifications (e.g., modifications to berms, bypasses, and storm drains to divert storm water away from and prevent its discharge into the Aqueduct and other similar conveyance channels) by the end of 2001. Develop and implement watershed programs adjacent to appropriate conveyance channels by the beginning of 2004. Identify and begin implementation of necessary physical improvements by the end of 2005.</p>	CBDA	Bay Delta	Implemented BMPs	7/1/03 to 6/30/08
Implement 24.014	North Bay Aqueduct Watershed Best Management Practices	<p><b>Objective:</b> This project is designed to implement the recommendations included in the prior Prop 204 grant that tested pilot BMPs in the North Bay Aqueduct (NBA) watershed.</p> <p><b>Description:</b> This project is to measurably improve the water quality at the NBA by installing fencing to keep livestock out of the main channel in the watershed and to allow re-vegetation on eroded parts of the channel. The fencing will be done on a watershed wide basis. The project includes providing alternate water supplies for livestock who had previously been using the local channels as a drinking water source.</p>	CBDA	North Bay Aqueduct	BMP Implementation	7/1/03 to 6/30/08
Implement 26.002	Remediation of Spills and Illegal Discharge Pollution Sites.	<p><b>Objective:</b> To remediate and restore fish and wildlife resources impacted by spills or illegal discharges of pollution.</p> <p><b>Description:</b> To develop and implement restoration programs for the recovery of fish and wildlife resources that have been impacted by spills and illegal discharges.</p>	DFG	Statewide	Successful restoration of areas impacted by spills and illegal discharges.	7/1/03 to 6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 26.007	NPS Pollution Prevention of DFG-owned lands	<p><b>Objective:</b> To ensure that activities on DFG-owned lands do not contribute to NPS pollution</p> <p><b>Description:</b> This activity will include the implementation of effective MMs, as recommended by management plans for all DFG-owned properties. Special focus will be paid to properties that merit expedited attention, based on their status as either impaired (listed), or pristine water bodies.</p>	DFG	Statewide	Implementation of MMs as recommended by Management Plans for all DFG-owned lands, and resulting improvement or protection of water bodies.	7/1/03 to 6/30/08
Implement 28.102	Training for implementation of Phase II Stormwater Permit	<p><b>Objective:</b> Train employees to implement Phase II permit requirements</p> <p><b>Description:</b> Train all personnel in effected park units on procedures to be followed in accomplishing activities controlled by Stormwater Regulation.</p>	DPR	Statewide	Training Sessions Completed	7/1/03 to 6/30/08
Implement 28.103	Phase II Stormwater Permit Implementation	<p><b>Objective:</b> Reduce impacts of operations on water resources</p> <p><b>Description:</b> Following Stormwater Permit requirements by utilizing Manual of Practices for NPDES. MP implementation on each activity type.</p>	DPR	Statewide	Projects done incorporating all required practices listed in Manual	7/1/03 to 6/30/08
Implement 28.104	Equipment Cleaning Facility Construction	<p><b>Objective:</b> Maintain fleet and meet water quality expectations</p> <p><b>Description:</b> Construct wash rack facilities</p>	DPR	Statewide	Completed wash rack facilities	7/1/03 to 6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 28.105	Spill Plans for fueling facilities(SPCC)	<p><b>Objective:</b> Reduce and eliminate pollution from stormwater at fueling areas.</p> <p><b>Description:</b> Continually update Spill plans as needed throughout the state park system. Approximately 80 sites have spill plans. Changes in personnel and regulations create need for plan updating.</p>	DPR	Statewide	Adequate SPCC at units where they are required	1/15/03 to 6/30/08
Implement 28.106	Spill Training for employees	<p><b>Objective:</b> Insure all employees know how to respond to spills of materials that can pollute stormwater runoff.</p> <p><b>Description:</b> Provide Orphan Spill training to emphasize clean up of potential NPS pollution</p>	DPR	Statewide	Successful Spill cleanup	7/1/03 to 6/30/08
Implement 28.107	Litter Gitter Educational Program	<p><b>Objective:</b> Educate public of negative effects of litter on the environment</p> <p><b>Description:</b> Litter Gitter Educational program utilized at park units to educate about effects of litter on environment</p>	DPR	Statewide	Provide program	1/1/03 to 6/30/08
Implement 28.108	Information for field on NPS	<p><b>Objective:</b> Meet requirements of regulations and accomplish department mission</p> <p><b>Description:</b> Provide information and advice field units to reinforce policies, need for training employees, etc.</p>	DPR	Statewide	Overall operation of department	1/1/03 to 12/30/07
Implement 28.109	Include NPS as topic in training	<p><b>Objective:</b> Communication</p> <p><b>Description:</b> Include NPS as topic in training sessions involving department employees</p>	DPR	Statewide	Sessions with NPS topics included	1/1/03 to 12/30/07

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 28.110	Include NPS related policy in department operations manual	<p><b>Objective:</b> Document policy and make available to field units</p> <p><b>Description:</b> Include NPS related policy in department manuals and guides</p>	DPR	Statewide	Publications with NPS information and references.	1/1/03 to 12/30/07
Implement 28.114	Culvert Pipe Erosion Reduction	<p><b>Objective:</b> Reduce erosion impacts of culvert facilities</p> <p><b>Description:</b> Reconstruct culvert pipe installations to reduce or eliminate current shotgun installation erosion situations.</p>	DPR	Statewide	Reduce erosion from culvert installations throughout the system.	7/1/03 to 6/30/08
Implement 28.121	MP updates	<p><b>Objective:</b> Keep MP information current with best available technologies and add practices for new activities.</p> <p><b>Description:</b> Review and update MP information as new technologies are discovered or developed and include new BMPs for activities that have been missed or become a part of department programs</p>	DPR	Statewide	Updated BMP package available for field use	1/1/03 to 12/30/07
Implement 3.005	Other Sediment Discharges	<p><b>Objective:</b> Compliance with Basin Plan waste discharge prohibitions.</p> <p><b>Description:</b> Outreach, inspections and, enforcement actions.</p>	RWQCB-1	Regionwide RB1	Compliance	7/1/03 to 6/30/08
Implement 3.006	Garcia River TMDL Implementation	<p><b>Objective:</b> To implement the Garcia River TMDL for sediment.</p> <p><b>Description:</b> All staff activities towards implementation of the TMDL.</p>	RWQCB-1	Mendocino County	Garcia River water quality objectives met, and beneficial uses protected.	7/1/03 to 6/30/08



**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 3.009	US Forest Service Non-Timber Activities	<p><b>Objective:</b> To implement the 208 Management Agency Agreement (MAA) for compliance with Basin Plan prohibitions and water quality objectives.</p> <p><b>Description:</b> All staff activities towards implementation of the 208 MAA, including NEPA reviews, complaint inspections, and enforcement.</p>	RWQCB-1	Regionwide RB1	Compliance with Basin Plan waste discharge prohibitions and water quality objectives.	7/1/03 to	6/30/08
Implement 3.010	NPS Grants	<p><b>Objective:</b> To provide financial assistance and technical help to watershed organizations towards water quality protection.</p> <p><b>Description:</b> Pursue, approve, and help implement good water quality protection grants under our grant programs (CWA 319(h)) (CWA 205(j)) (State Propositions) (CalFed).</p>	RWQCB-1	Regionwide RB1	Number of grants.	7/1/03 to	6/30/08
Implement 30.006	State Lands NPS Management Measure & BMP Implementation	<p><b>Objective:</b> Using Strategic Action Plan developed in Activity 30.004, implement NPS management measures and BMPs on State lands, pending available funding.</p> <p><b>Description:</b> Using Strategic Action Plan developed in Activity 30.004, implement NPS management measures and BMPs on State lands (pending available funding).</p>	CSLC	Statewide lands under the CSLC's jurisdiction	Success criteria to be determined in Strategic Action Plan, Activity 30.004 and incorporated into 5-year Plan.	4/1/04 to	6/30/08
Implement 4.050	TMDL implementation activities for Tomales Bay pathogens	<p><b>Objective:</b> Develop and implement pathogen TMDL, including measures to address septic systems.</p> <p><b>Description:</b> Activities related to implementation of Tomales Bay pathogen 'TMDL</p>	RWQCB-2	Marin County	Reduction in coliform levels in Tomales Bay and tributaries	7/1/03 to	6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 5.019	Solicit and manage grants supporting priority projects	<p><b>Objective:</b> To provide technical assistance and to participate in development of watershed agriculture working groups to facilitate implementation of regional Ag Water Quality Management Plan.</p> <p><b>Description:</b> Support and manage grants for priority projects</p>	RWQCB-3	Regionwide RB3	Implementation of priority projects	7/1/03 to 6/30/08
Implement 5.023	Assist planning, development & participate in NPS Conference	<p><b>Objective:</b> Contribute to planning, development &amp; implementation of NPS Conference</p> <p><b>Description:</b> Provide for NPS technical education opportunity.</p>	RWQCB-3	Regionwide RB3	Successful NPS Conference	7/1/03 to 6/30/08
Implement 6.038	Los Angeles River Street-End Biofiltration	<p><b>Objective:</b> The project primary objective is to filter pollutants to improve water quality. The goals include enhancing habitat, improving quality of life and promoting stewardship through outreach and education.</p> <p><b>Description:</b> The project will design and install non-structural Best Management Practices (BMPs) to filter nonpoint pollutants, enhance habitat and provide education and stewardship opportunities to promote water quality improvement</p>	RWQCB-4	Los Angeles County	Will be finalized at contract approval time	7/1/03 to 6/30/08
Implement 6.053	TMDL Implementation for Santa Clara River-Nutrients	<p><b>Objective:</b> MP implementation</p> <p><b>Description:</b> Develop TMDL implementation plan and reschedule of implementation</p>	RWQCB-4	Ventura County	Delisting on 303 (d) list	7/1/03 to 6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 6.069	ACL 99-034 City of Los Angeles SEP - Phase II Water Study	<p><b>Objective:</b> Working with San Gabriel River WaterCouncil &amp; Santa Monica Bay Restoration Fund to implement Phase II of the Water Augmentation Study in Santa Monica Bay and San Gabriel River</p> <p><b>Description:</b> Phase II- Water Augmentation Study: Regional Board staff will overlook the SEP project to ensure milestones and goals are met through regular reports submitted to RB staff by the SEP Proponent/Manager. Reports will discuss the project's standing and what goals, milestones, problems etc. the project has faced during its implementation.</p>	RWQCB-4	Los Angeles	Implementation of Study	7/1/03 to	6/30/08
Implement 6.079	Long Beach MS4 NPDES Permit Renewal	<p><b>Objective:</b> To renew Long Beach MS4 NPDES Permit.</p> <p><b>Description:</b> Develop 2004 Long Beach MS4 NPDES Permit</p>	RWQCB-4	City of Long Beach	Adoption of a new Long Beach MS4 NPDES Permit	7/1/03 to	6/30/08
Implement 7.019	Local Watershed Support - Watershed Projects	<p><b>Objective:</b> Projects implemented to improve water quality and aquatic habitat and facilitate transfer (to other watersheds) of information learned from these projects.</p> <p><b>Description:</b> Review projects implemented to improve water quality and aquatic habitat and facilitate transfer (to other watersheds) of information learned from these projects.</p>	RWQCB-5	Central Valley	Stream improvement projects throughout the region.	7/1/03 to	6/30/08
Implement 9.002	Cherokee Watershed Water Quality Investigation	<p><b>Objective:</b> Assess surface water quality of Cherokee Watershed</p> <p><b>Description:</b> Implement a surface water quality investigation</p>	RWQCB-5R	Butte County	Completion of monitoring	7/1/03 to	2/1/05

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 9.004	Upper Pit River Watershed Enhancement and Protection Project	<p><b>Objective:</b> Support Water Quality and habitat improvements on Turner Creek. Support watershed group</p> <p><b>Description:</b> Implement water quality and habitat improvements and continue watershed group activities</p>	RWQCB-5R	Pit River and Turner Creek	Completion of enhancement projects	7/1/03 to 6/30/08
Implement 9.005	Goose Lake Basin Enhancement Project	<p><b>Objective:</b> Implementation of priority stream enhancement projects. Support work of Goose Lake Watershed Council and Watershed coordinator</p> <p><b>Description:</b> Facilitate the Public Outreach and Education Subcommittee.</p>	RWQCB-5R	Lassen and Willow Creeks	Stream enhancement implementation, Council work, and Watershed coordinator work.	7/1/03 to 6/30/08
Implement 9.006	Humbug and Charles Creek Restoration Project	<p><b>Objective:</b> Implement restoration to reduce sediment and improve summer temperature and flow.</p> <p><b>Description:</b> Implement restoration to reduce sediment and improve summer temperature and flow.</p>	RWQCB-5R	Northern Sierra	Implementation of restoration project	9/1/03 to 6/30/08
Implement 9.007	Westside Watershed Enhancement Program	<p><b>Objective:</b> Outreach education, and project implementation to reduce sediment and restore stream function.</p> <p><b>Description:</b> Implementation of stream restoration project</p>	RWQCB-5R	West side of Tehama and Glen Counties	Implementation of project	7/1/03 to 6/30/08
Implement 9.017	Upper Spanish Creek Watershed Assessment & Restoration Strat	<p><b>Objective:</b> To conduct a watershed assessment for Upper Spanish Creek</p> <p><b>Description:</b> Conduct a watershed assessment and restoration strategy</p>	RWQCB-5R	Plumas County	Completed watershed assessment	7/1/03 to 6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Track/Monitor 15.018	Coordinate TMDL unit with stakeholders	<p><b>Objective:</b> Coordinate TMDL unit work with stakeholders to document levels of use and associated impacts to beneficial uses.</p> <p><b>Description:</b> Coordinate TMDL unit work with stakeholders to document levels of use and associated impacts to beneficial uses.</p>	RWQCB-8	Newport Bay Watershed	Coordination with stakeholders	7/1/03 to 6/30/08
Track/Monitor 16.002	Monitoring Program Inventory	<p><b>Objective:</b> To develop an inventory of ongoing ambient monitoring efforts, and evaluate additional monitoring needs.</p> <p><b>Description:</b> Identify monitoring programs, compile into a tabulated summary, and identify locations that are not being addressed in current monitoring programs.</p>	RWQCB-9	Regionwide - Region 9	A tabulated summary of ongoing ambient monitoring and identification of ambient monitoring voids in San Diego Region.	7/1/03 to 6/30/08
Track/Monitor 16.003	NPS Project Prioritization	<p><b>Objective:</b> To coordinate and redirect ongoing ambient monitoring efforts to areas that have the greatest need.</p> <p><b>Description:</b> Identify current monitoring projects that can be re-directed to necessary monitoring sites, and coordinate that process.</p>	RWQCB-9	Regionwide - RWQCB9	Ambient monitoring that provides useful data.	7/1/03 to 6/30/08
Track/Monitor 16.004	SWAMP - Comprehensive Monitoring	<p><b>Objective:</b> To develop and implement a comprehensive ambient monitoring program</p> <p><b>Description:</b> Work with the existing SWAMP program to develop methodologies to more effectively monitor water quality Statewide.</p>	RWQCB-9	Statewide	Thorough monitoring of all waters of the State at least once every five years.	7/1/03 to 6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Track/Monitor 16.005	Water Quality Assessment	<b>Objective:</b> To compile and evaluate results of ambient monitoring	RWQCB-9	Regionwide - Region 9	Comprehensive assessment of the water quality and beneficial uses of waters in the San Diego Region.	7/1/03 to 6/30/08
		<b>Description:</b> Work with SWAMP and all other identified monitoring programs, and compile all monitoring results. Complete an assessment of these results to better understand water quality conditions in San Diego Region.				
Track/Monitor 2.722	Program Effectiveness Tracking	<b>Objective:</b> To effectively track effectiveness of USEPA and SWRCB programs through changes in water quality.	SWRCB	Statewide	An agreed-upon program for program assessment.	7/1/03 to 6/30/08
		<b>Description:</b> USEPA and SWRCB will work together to identify how information generated by monitoring activities, the 305(b) report and the 303(d) list will be used to track improvements in water quality and evaluate the overall effectiveness of USEPA and SWRCB programs.				
Track/Monitor 2.752	Citizen Monitoring Russian River First Flush	<b>Objective:</b> Involve citizens in monitoring stormwater runoff pollution to promote stewardship, and collect usable data.		Russian River Basin	Complete monitoring of watershed.	7/1/03 to 6/30/08
		<b>Description:</b> SWRCB Clean Water Team coordinator and RB1 staff to assist citizens in collecting and analyzing stormwater runoff samples during the first runoff event of the rainy season.				

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Track/Monitor 22.005	Snapshot Day	<p><b>Objective:</b> Continue to promote the Snapshot Day and expand it throughout the State.</p> <p><b>Description:</b> Promote and increase participation in Snapshot Day throughout the State and secure a continuous funding source. Collect basic water quality measurements: temp, DO, pH, TSS, nutrients, and bacteria.</p>	CCC	California coast	Continuation of coordinated water sampling of coastal watersheds.	7/1/03 to 6/30/08
Track/Monitor 22.011	Permit Compliance and BMP Implementation	<p><b>Objective:</b> Ensure the successful implementation of required BMPs at permitted developments and redevelopments and assess BMP effectiveness</p> <p><b>Description:</b> Conduct field inspections of permitted developments and redevelopments for compliance with WQ conditions and implementation of required BMPs, and assess BMP effectiveness.</p>	CCC	California coast	Identification of priority projects for field visits. Documentation of site investigations.	7/1/03 to 6/30/08
Track/Monitor 26.003	Follow-up Monitoring at Spill and Illegal discharge Sites	<p><b>Objective:</b> To monitor sites that have been designated for MM implementation as a response to spills and illegal discharges that impacted fish and wildlife resources.</p> <p><b>Description:</b> This activity will require the tracking of locations of incident sites where remediation programs have been established. The timeline for MM implementation will be coordinated with the follow-up monitoring to ensure that successful remediation has taken place.</p>	DFG	Statewide	Follow-up monitoring at all remediation sites	7/1/03 to 6/30/08

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Track/Monitor 28.008	Monitoring	<p><b>Objective:</b> Use monitoring to determine Program Plan and other regular DPR environmental program accomplishments, and to adjust as necessary to improve effectiveness in land management practices.</p> <p><b>Description:</b> Track and monitor the development of BMPs for use in developing and implementing action plans.</p>	DPR	State Park System units	Monitoring and tracking will occur on DPR lands to direct ongoing and future actions.	7/1/03 to 6/30/08
Track/Monitor 28.111	Tracking and Monitoring	<p><b>Objective:</b> Document actual performance of department</p> <p><b>Description:</b> When interacting with field units ask employees if they are aware of MP package, DOM policies, NPS program, etc</p>	DPR	Statewide	Positive response to questions	1/1/03 to 12/30/07
Track/Monitor 34.001	Sampling and Analysis of Drinking Water Quality	<p><b>Objective:</b> Collect, store, analyze, and maintain drinking water quality data to ensure regulatory compliance by public water systems as required by federal and state Safe Drinking Water Act.</p> <p><b>Description:</b> Collect, store, analyze, and maintain drinking water quality data to ensure that public water systems conduct water quality monitoring as required by federal and state Safe Drinking Water Act.</p>	DHS	Statewide	Complete set of analyzed water quality data.	7/1/03 to 6/30/08
Track/Monitor 5.119	Monitor watersheds for water quality improvements	<p><b>Objective:</b> Evaluate water quality improvements and modify implementation plans accordingly</p> <p><b>Description:</b> Water quality monitoring associated with TMDL implementation plans and CCAMP will be used to evaluation the effectiveness of implementation activities, future implementation plans will be modified according to findings</p>	RWQCB-3	Regionwide RB3	Water quality improvement	7/1/03 to 6/30/08



**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Track/Monitor 6.019	Water Quality Assessment, Source ID & Mgmt Action eval. SG R	<p><b>Objective:</b> To restore the beneficial uses of the San Gabriel River (#)</p> <p><b>Description:</b> Use both newly and previously collected data to characterize water quality throughout the watershed, identified sources, and evaluates effectiveness of management actions on water quality through development and use of dynamic water quality model. Multiple impairments exist in river, estuary and along coast. Will integrate with citizen monitoring recently funded by CalFed.</p>	RWQCB-4	Los Angeles county	Will be finalized at contract approval time	7/1/03 to 6/30/08
Track/Monitor 7.014	Local Watershed Support - Monitoring Assistance	<p><b>Objective:</b> Assure that local watershed groups can produce high quality monitoring results.</p> <p><b>Description:</b> Help with study design and monitoring plan development, technical support for monitoring, Quality Assurance Project Plans (QAPP) development, database management, and data analysis for groups in the Sacramento, San Joaquin and tulare basins.</p>	RWQCB-5	Central Valley	Monitoring plans, technical workshops and QAPP's from watershed groups	7/1/03 to 6/30/08
Report 2.8021	2003 NPS Conference	<p><b>Objective:</b> To provide information regarding current NPS issues and technologies to staff at both the State and regional levels as well as the general public.</p> <p><b>Description:</b> To develop and coordinate the 2003 NPS Conference with SWRCB, the RWQCBs, USEPA, and sponsors to ensure the success of the conference. Lead the planning steering committee on finalizing details of the conference and field session and assist in the registration process. Coordinate with project managers on presentations and posters. Follow up with USEPA contractor in evaluation of the conference. Deliverable: Conference</p>	SWRCB	Ventura	Well-attended conference	7/1/03 to 11/11/03

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Report 2.810	2007 NPS Conference	<p><b>Objective:</b> To provide information regarding current NPS issues and technologies to staff at both the State and regional levels as well as the general public.</p> <p><b>Description:</b> To develop and coordinate the 2007 NPS Conference with SWRCB, the RWQCBs, USEPA, and sponsors to ensure the success of the conference. Lead the planning steering committee on formulating the conference theme in relation to TMDLs and NPS issues, identifying the location of the conference, topics, potential speakers, and dates, developing public announcements, soliciting speakers, developing the agenda, finalizing details of the conference and field session and assist in the registration process. Coordinate with project managers on presentations and posters. Follow up in evaluation of the conference. Deliverable: Conference</p>	SWRCB	Statewide	Well-attended conference	10/1/06 to 12/31/07
Report 2.812	Nonpoint Source Newsletter	<p><b>Objective:</b> To share information about on-the-ground NPS projects through a publication devoted to California's management of NPS pollution and to increase collaboration and coordination among active stakeholders in NPS management.</p> <p><b>Description:</b> 319 contract (The Runoff Rundown: A Catalog of California's Nonpoint Source Management Activities) with Water Education Foundation (WEF) in the amount of \$181,200. Produce six newsletters that will include updates on TMDL development and implementation, activities within each RWQCB, and legislative and regulatory actions. Include motivational case studies and helpful information about technical and funding assistance opportunities. Deliverable: 6 NPS Newsletters (one twice a year for three years)</p>	SWRCB	Statewide	Surveys	12/1/03 to 12/31/06

**Table IB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Report 28.006	Program Plan Implementation Status Reports	<p><b>Objective:</b> Show progress in Program Plan implementation and report ongoing and past DPR activities that have reduced or eliminated sources of polluted runoff.</p> <p><b>Description:</b> Report to CCC the determination of BMPs, implementation plans, coordination with other agencies and stakeholders and actions taken to control or reduce NPS pollution.</p>	DPR	State Park System units	Report on initiated, ongoing and completed activities, with progress shown.	7/1/03 to 6/30/08
Report 5.024	Prepare NPS reports for agency and public	<p><b>Objective:</b> Report on NPS plans, activities and accomplishments</p> <p><b>Description:</b> Prepare NPS reports</p>	RWQCB-3	Regionwide RB3	Complete NPS reports	7/1/03 to 6/30/08
Report 7.020	Local Watershed Support - Watershed Reports	<p><b>Objective:</b> Provide state of the watershed information to other agencies and stakeholder groups.</p> <p><b>Description:</b> Develop watershed reports that compile existing information from local watershed groups (assessment, plans, monitoring)</p>	RWQCB-5	Central Valley	Watershed reports	7/1/03 to 6/30/08

**SECTION II  
 AGRICULTURE CATEGORY  
 FIVE-YEAR IMPLEMENTATION PLAN  
 July 2003 through June 2008**

**A. AGRICULTURE MMs AND ISSUES OF CONCERN**

According to nationwide water quality assessments, the leading cause of water quality impairments are from nonpoint sources of pollution. Out of the six basic categories of NPS pollution, agriculture remains the most significant contributor to these impairments. Pollution from agriculture includes nutrients, sediments, salts, pesticides, hydrocarbons, and animal waste. The NPS Program includes seven MMs for the control of pollution related to agriculture. These MMs are listed in Table IIA, below, and more completely described in Appendix II of this document.

**Table IIA  
 Agriculture Category MMs**

<b>MM Code</b>	<b>Agriculture MM Title</b>
1A	Erosion and Sediment Control
1B	Facility Wastewater and Runoff from Confined Animal Facilities
1C	Nutrient Management
1D	Pesticide Management
1E	Grazing Management
1F	Irrigation Water Management
1G	Education/Outreach
1H	Agricultural Used Oil/Waste Management (new)

Due to the fact that California ranks number one in the country in agricultural production, the State has a high potential for water-quality problems related to agricultural activities. Furthermore, California is host to a wide variety of climates and geography. The consequence of this variety is an assortment of complex dilemmas related to agricultural runoff. For example irrigation return flows entering the Salton Sea are the only source that prevents the sea from evaporating. The Salton Sea is considered to be important habitat for migratory birds, yet these irrigation flows are laden with nutrients, sediment, and pesticides. Agriculture MMs designed to control runoff would limit irrigation return flows, which in this Region, would in turn cause the Salton Sea to dry up. This environmental Catch-22 is just one of the many plights faced by NPS water quality managers in California.

Improper management of manure produced at Confined Animal Facilities (CAFs) such as dairies, feedlots, and poultry operations can result in adverse impacts to surface water, groundwater, and air. The impacts can come from the livestock housing and waste storage facilities or from cropland where the animal waste is applied for fertilization of cropland.

## **B. RELATION TO OTHER SWRCB PROGRAMS**

### **1. Waste Discharge Requirements and Conditional Waiver Policies**

Section 13260 of the California Water Code (CWC) requires any person discharging waste or proposing to discharge waste “that could affect the quality of the waters of the state” to file a report of waste discharge (RWD). However, no RWD need be filed if the requirement is waived pursuant to Section 13269 of the CWC. Following receipt of a RWD, a RWQCB can issue WDRs that prescribe how the discharge is to be managed.

Wastewater discharges from irrigated land including stormwater runoff, irrigation tailwater, and tile drainage are subject to regulation under the CWC. However, the RWQCBs have historically exempted farmers from the requirement to file a RWD and regulated the discharge from cropland under NPS programs that relied on MPs to protect water quality. In 1999, several environmental groups initiated a suit challenging the validity of the waiver program for discharges from cropland in the Central Valley, which comprises 75% of California’s irrigated lands.

On 5 December 2002, the Central Valley Regional Water Quality Control Board (RWQCB5) adopted a new Conditional Waiver for discharges to surface waters from irrigated lands including nurseries and managed wetlands. The Conditional Waiver establishes numerous requirements that apply to farmers and others such as irrigation and reclamation districts that discharge wastewater and runoff from irrigated cropland.

The RWQCB5 also committed to preparing a 10-year implementation program for the regulation of waste discharge from irrigated lands and to undertake a two-year Environmental Impact Report (EIR) process to analyze the potential significant adverse impacts of the waiver program.

As part of the current focus on water that could be impacted by discharges from cropland, the University of California at Davis (UCD) has begun sampling irrigation drains in the Central Valley under contract with the RWQCB5. Sampling began in March 2003, and will continue through September 2003. Twenty-four sites will be sampled for toxicity. If toxicity is found, additional sampling will occur to identify the cause of the toxicity.

### **2. NPDES and NPS for CAFs/CAFOs**

In 1982 most Regional Water Quality Control Boards adopted a conditional waiver from the need to file for Confined Animal Facilities (CAFs) to file a RWD as required by Title 27 of the Code of California Regulations (CCR). The waivers that applied to CAFs ended in January 2003 pursuant to Senate Bill 390. Some RWQCBs may adopt a new conditional waiver policy for Animal Feeding Operations (AFOs), the RWQCB5 is expected to adopt a permitting program instead of regulating the CAFs under an NPS program. In addition, under new federal regulations that became effective in March 2003, large CAFs (identified in federal regulations as concentrated animal feeding operations or “CAFOs”) are subject to National Pollutant Discharge Elimination System (NPDES) permits.

The NPDES permits apply to both the facilities and the associated cropland. However, if the animal wastes are applied to cropland in accordance with an approved Nutrient Management Plan (NMP), stormwater runoff from the cropland is not subject to regulation under the NPDES permit. That is not the case with WDRs that a RWQCB may issue to the dairy. The WDRs do not allow any discharge that can adversely impact water quality.

The effect of the new permitting programs for CAFs will be that facility wastewater and runoff will be increasingly regulated as point source discharges instead of NPS discharges. However, it will be difficult to differentiate the effects of stormwater runoff from cropland at a CAF where animal wastes are used for fertilization and runoff from nearby cropland where commercial fertilizers are utilized. If CAFs are present in a watershed, monitoring programs developed as part of a NPS programs may need to be modified to provide for assessing the relative contribution of discharges from the CAFs.

### 3. Impaired 303(d) Lists and TMDLs

Under Section 303(d) of the Clean Water Act, California is required to compile a list of impaired waters that fail to meet applicable water quality standards or that cannot support their designated beneficial uses. This list, called a '303(d) list' is submitted to Congress every two years, and California is required to develop a Total Maximum Daily Load (TMDL) for each pollutant causing impairment to the waterbodies that are listed. The 2002 303(d) list identifies 518 waterbodies in California that are impaired due to NPS pollution. Of those 518, 205 waterbodies are listed for impairments from agricultural sources. These 205 waterbodies represent 30% of all listed waterbodies impaired by point and nonpoint sources of pollution.

Total Maximum Daily Loads (TMDLs) are being developed and implemented throughout the state for every Agriculture MM. These TMDLs will play a critical role in restoring water quality in waters impaired by agriculture related pollutants.

## C. ADDITIONAL MANAGEMENT MEASURE PROPOSAL

For the first time since the adoption of the NPS Program Plan, an additional Management Measure (MM) has been proposed. The California Integrated Waste Management Board (CIWMB) submitted the proposal. A process for proposing an additional MM was developed by SWRCB staff, and the Agriculture Subcommittee of the IACC voted to include CIWMB's proposed Management Measure in the 2003-2008 5-Year Plan. The proposed Management Measure is as follows;

### **Title: Agricultural Used Oil/Hazardous Waste Management**

The implementation of this MM is intended to reduce contamination of surface water from improper storage and disposal of used oil and hazardous waste generated from agricultural equipment and machinery maintenance. Implementation includes the installation and maintenance of used oil and hazardous material collection facilities for agricultural growers.

Prior to 1995, small acreage growers (1-499 acres) did not have access to convenient oil collection facilities. They generated too little used oil and oil filters to justify paying a hauler for collection but generated too much to dispose of their oil and filters at certified used oil collection centers. From 1995 to the present, the CIWMB has given counties and non-profits grant funds to establish agricultural used oil facilities (at oil distributors, transfer stations and other sites) or mobile used oil collection programs for growers. Twenty-five counties currently offer growers permanent or mobile agricultural used oil collection and have collected over 160,000 gallons of used oil to date. Agricultural used oil collection programs are currently being implemented in an additional five counties. Without these programs, this oil would have continued to be stockpiled on growers' property with the potential to leach into ground water and waterways.

The new MM is expanded to cover pollution issues similar to waste oil to those of other agriculture-use fuels and hazardous material waste.

## **D. OBJECTIVES AND ACTIVITY SUMMARY**

### **1. Agriculture Category Objectives**

The State of California recently undertook a concerted, collaborative process for the development of Category Objectives for the NPS Implementation Plan 2003-2008. Over a period of approximately one year, the Statewide Interagency Coordinating Committee met frequently to consider the missions of each agency relative to sources of pollution in agriculture; to formulate a means for collaboration, and to set overall objectives for the collaborative process. The result of this effort, which will formulate the focus of California relative to Agriculture NPS pollution prevention, are the Agriculture Category Objectives, which are listed below. These Objectives will serve to guide and measure the progress that will be made over the next five years.

- a) More efficiently use existing resources by continuing to improve upon and expand current interagency coordination in order to more effectively manage agricultural pollution (including monitoring and enforcement mechanisms).
- b) Develop information on the overall effectiveness of MP implementation on improving water quality.
- c) Develop and implement TMDLs for waterbodies impaired by agricultural sources.
- d) Continue to promote outreach and education and provide technical assistance to the agricultural community.
- e) Continue to assess waterbodies, identify sources of NPS impacts from agricultural land, and increase the number of inspections of potential sources.
- f) Develop watershed based plans and target the implementation of management measures and practices to address impacts from agricultural land uses.

Further clarification of the intent of these objectives is provided in Appendix III.

### **2. Activity Summary for Agriculture Category**

The agriculture related activities (listed in Table IIB address all of the identified MMs for Agriculture. The two MMs that have the most planned activities taking place are 1A: Erosion and Sediment Control, and 1G: Outreach and Education. There are also many activities planned for the next five years that address all MMs in the Agriculture category. Additionally, the six Agriculture Category Objectives (listed in Section IID, above) are fully supported by the activities in this category.

**Table IIIB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

**Agriculture**

<b>Management Measure: 1A Erosion and Sediment Control</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 10.090	Plymouth Area Vineyard and Erosion Control	<p><b>Objective:</b> Protect Pigeon, Big Indian and Little Indian Creeks' and the South Fork Cosumnes River surface and shallow subsurface water quality to ensure a safe drinking water supply for Plymouth and enhancement of Cosumnes River water quality.</p> <p><b>Description:</b> Project components include: (1) Assessment of the impacts of erosion and associated sediment, pesticide and nutrient transport from vineyards, (2) Assessment of the efficacy of current (voluntary) erosion control practices, and suggested erosion control measures on tests in vineyards on slopes of these basins. (3) Development of BMPs for vineyards on steep slopes within these basins based on the results of (2), and on practices used in other grape-growing areas.</p>	RWQCB-5S	Regionwide RB5	Completed assessment on BMPs for vineyards on steep slopes	7/1/04 to 2/28/07
Pre-Implementation 11.41	Topaz Lake Sediment TMDL	<p><b>Objective:</b> watershed restoration through the TMDL program</p> <p><b>Description:</b> Complete and implement the TMDL</p>	RWQCB-6	Mono County	completed TMDL	1/1/04 to 1/1/07
Pre-Implementation 11.47	West Walker River Sediment TMDL	<p><b>Objective:</b> watershed restoration through the TMDL program</p> <p><b>Description:</b> Complete and implement the TMDL</p>	RWQCB-6	Mono County	completed TMDL	1/1/05 to 1/1/10



**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 14.003	Imperial Valley Ag Drains Sediment TMDL	<p><b>Objective:</b> To develop a Sediment TMDL for the Imperial Valley Agricultural Drains (IVAD) discharging directly into the Salton Sea</p> <p><b>Description:</b> To develop a TMDL that will include a sediment numeric target for the IVAD, sources and concentrations of sediments, and an implementation plan. This activity is intended to reduce sediment concentrations in the Imperial Valley Agricultural Drains that drain directly into the Salton Sea. Staff has begun monitoring activities. Source analysis, allocations, implementation plan, economic analysis, CEQA and NES, peer review, public review, and Regional Board hearing are expected to be completed by early 2004.</p>	RWQCB-7	Regionwide RB7	Completion of the TMDL	1/1/02 to	12/1/04
Pre-Implementation 2.019-2	MAA and WQMP with BLM	<p><b>Objective:</b> Continue development of MAA and WQMP with the Bureau of Land Management.</p> <p><b>Description:</b> Facilitate meetings, and negotiate terms of MAA and appropriate WQMP with BLM staff</p>	SWRCB	Statewide, BLM lands	Completed MAA and WQMP	7/1/03 to	6/30/08
Pre-Implementation 2.030-1	Performance for Sustainability Vineyard/Winery Workgroup	<p><b>Objective:</b> To enhance environmental protection by convening a partnership devoted to applying the principle of sustainable development in California wine production.</p> <p><b>Description:</b> Develop a model for incorporating sustainability principles into localized decision making.</p>	SWRCB	Unknown at this time	Partnership results in implementation of sustainable vineyard/winery practices in California	7/1/03 to	6/30/08
Pre-Implementation 27.012-2	RCD Watershed Coordinator Grants - Phase III	<p><b>Objective:</b> Document progress achieved with phase III of Resource Conservation Districts (RCD) watershed coordinator grants.</p> <p><b>Description:</b> Administer RCD watershed coordinator grant program to provide funding to California RCDs to hire watershed coordinators.</p>	DOC	Statewide	Performance measures completed in individual RCD watershed coordinator grants.	7/1/03 to	6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 4.004	Napa River Watershed Task Force	<p><b>Objective:</b> Advising to watershed group with technical advice, proposal, report reviews, public meetings and hearings.</p> <p><b>Description:</b> Participation on Technical Advisory Committee, reviews proposals, work with stewardship groups for sulfur and Carneros watersheds, public meetings, etc.</p>	RWQCB-2	Napa County	Proposals that are funded, streamlined permit review and approval, County ordinances on setbacks.	7/1/03 to	6/1/08
Pre-Implementation 4.010	Ag Water Quality Protection Program	<p><b>Objective:</b> Work with partners in developing water quality program</p> <p><b>Description:</b> Form watershed working groups, develop individual farm plans, implement BMP's, and develop and implement monitoring.</p>	RWQCB-2	San Mateo County	Developed farm plans and implemented BMPs	7/1/03 to	12/31/04
Pre-Implementation 4.087-1	TMDL for Pathogens, Sonoma Creek	<p><b>Objective:</b> Develop TMDL for mercury in San Francisco Bay</p> <p><b>Description:</b> Preliminary and final reports and prepare Basin Plan amendment</p>	RWQCB-2	Sonoma County	Reports and Basin Plan amendment	6/30/04 to	4/30/06
Pre-Implementation 4.089-1	TMDL for Siltation, Tomales Bay	<p><b>Objective:</b> Develop TMDL for sediments for Tomales Bay</p> <p><b>Description:</b> Develop TMDL for sediment from agricultural lands and tributaries to Tomales Bay</p>	RWQCB-2	Marin County	Reports and Basin Plan amendment	6/30/04 to	12/31/06
Pre-Implementation 4.090-1	TMDL for Siltation, Walker Creek	<p><b>Objective:</b> Develop TMDL for sediments for Walker Creek</p> <p><b>Description:</b> Develop TMDL for sediment from agricultural lands on Walker Creek, major tributary to Tomales Bay</p>	RWQCB-2	Marin County	Reports and Basin Plan amendment	6/30/05 to	4/30/07

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 4.091-1	TMDL for Mercury, Walker Creek	<p><b>Objective:</b> Develop TMDL for mercury for Walker Creek</p> <p><b>Description:</b> Develop TMDL for mercury from old mercury mine in upper watershed of Walker Creek, major tributary to Tomales Bay</p>	RWQCB-2	Marin County	Reports and Basin Plan amendment	7/1/03 to	3/31/05
Pre-Implementation 4.092-1	TMDL for Siltation, Petaluma River	<p><b>Objective:</b> Develop TMDL for sediments in Petaluma River watershed</p> <p><b>Description:</b> Develop TMDL for sediment from agricultural activities (dairies, ranching, vineyards)</p>	RWQCB-2	Sonoma County	Reports and Basin Plan amendment	7/1/04 to	6/30/07
Pre-Implementation 8.005-2	Arroyo Pasajero CRMP - Domingene Watershed Assessment	<p><b>Objective:</b> Provide technical assistance to the development of the Domingene Watershed Assessment</p> <p><b>Description:</b> Provide technical assistance to the CRMP in the development of the Domingene Watershed Assessment</p>	RWQCB-5F	Westside of Tulare Lake Basin	Completion of the Watershed Assessment	12/31/03 to	12/31/05
Implement 14.001	Alamo River Sediment TMDL Implementation	<p><b>Objective:</b> To implement the Alamo River Sediment TMDL</p> <p><b>Description:</b> TMDL implementation activities that include monitoring, site visits, assessments of BMPs, and reporting these activities are ongoing and will continue for the next 13 years</p>	RWQCB-7	Regionwide RB7	Implementation of the TMDL	1/1/02 to	1/1/14
Implement 14.002	New River Sediment TMDL Implementation	<p><b>Objective:</b> To implement the New River Sediment TMDL</p> <p><b>Description:</b> TMDL implementation activities that include monitoring, site visits, assessments of BMPs, and reporting are ongoing and will continue for the next 13 years</p>	RWQCB-7	Regionwide RB7	Implementation of the TMDL	1/1/03 to	1/1/14

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 19.001	Agricultural Erosion Control	<p><b>Objective:</b> General objective of having growers consider use of compost/mulch for soil erosion control and for improving soil health.</p> <p><b>Description:</b> Disseminate information on use of urban-derived compost/mulch for erosion control and soil improvement at trade shows, RCD meetings, conferences, etc. Information based on: 1) completed CIWMB erosion control projects in Calleguas Creek watershed, Napa County hillside vineyard, Sonoma County hillside vineyard; 2) completed CIWMB compost demonstration projects in Salinas Valley, Pajaro River watershed, and other areas (see <a href="http://www.ciwmb.ca.gov/Organics">http://www.ciwmb.ca.gov/Organics</a>); 3) ongoing contract with CDFA's Fertilizer Research and Education Program.,</p>	CIWMB	Statewide	Increased purchase of urban-derived compost and mulch by growers	7/1/03 to	6/30/08
Implement 19.002-1	Napa Vineyard Erosion Control Watershed Project	<p><b>Objective:</b> Using compost and mulch in hillside vineyard growing operations to mitigate erosion of sediments into local watershed.</p> <p><b>Description:</b> Promote systematic use of compost and mulch to vineyards in Napa Watershed and disseminate outreach information on application techniques.</p>	CIWMB	Napa	Increased utilization of compost and mulch in normal vineyard growing operations.	7/1/03 to	7/1/05
Implement 3.12-1	Fish Friendly Farming	<p><b>Objective:</b> Promote vineyard construction, operation, and maintenance in a manner that is protective of water quality - to improve water quality and to restore and sustain habitat for federally listed salmonids.</p> <p><b>Description:</b> outreach/educational activities; farm conservation plan review; site inspections</p>	RWQCB-1	Sonoma and Mendocino Counties	Improved water quality	1/1/02 to	6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 4.001-1	TMDL for siltation, Napa River	<p><b>Objective:</b> Develop and implement TMDL for siltation at Napa River Watershed</p> <p><b>Description:</b> Develop and implement TMDL for siltation in Napa River Watershed</p>	RWQCB-2	Napa County	Completed TMDL, project report, final report, Basin Plan amendment.	7/1/03 to 5/31/05
Implement 4.002-1	TMDL for siltation, Sonoma Creek	<p><b>Objective:</b> Develop and implement TMDL for siltation in Sonoma Creek</p> <p><b>Description:</b> Develop and implement TMDL for siltation in Sonoma Creek Watershed</p>	RWQCB-2	Sonoma Creek Watershed	Preliminary and final project reports, Basin Plan amendment	7/1/03 to 6/30/05
Implement 4.007-1	TMDL for Siltation, Pescadero Butano	<p><b>Objective:</b> Develop and implement TMDL for siltation in Pescadero and Butano watersheds</p> <p><b>Description:</b> Develop and implement TMDL for siltation in Pescadero/Butano Watersheds</p>	RWQCB-2	San Mateo County	Preliminary and final project reports, Basin Plan amendment	7/1/04 to 6/30/07
Implement 4.008-1	TMDL for Siltation, Lagunitas Creek	<p><b>Objective:</b> Develop and implement TMDL for siltation at Lagunitas Creek</p> <p><b>Description:</b> Develop and implement TMDL for Lagunitas Creek</p>	RWQCB-2	Lagunitas Creek	Preliminary and final project reports, Basin Plan amendment	6/1/04 to 4/30/07
Implement 4.009-1	TMDL for Siltation, San Gregorio Creek	<p><b>Objective:</b> Develop and implement TMDL for siltation at San Gregorio Creek</p> <p><b>Description:</b> Develop and implement TMDL for San Gregorio Creek</p>	RWQCB-2	San Gregorio Creek	Preliminary and final project reports, Basin Plan amendment	7/1/04 to 6/30/07

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 4.013-1	Manage contract on citizen monitoring	<p><b>Objective:</b> Oversight of contract to do citizen monitoring and to implement restoration project(s) to reduce sediment loading.</p> <p><b>Description:</b> Grant to do citizen monitoring in the watershed related to nonpoint source pollution, including sedimentation and urban runoff</p>	RWQCB-2	Marin County	Citizen monitoring teams created, sediment control project completed	7/1/03 to 12/31/05
Implement 4.017-2	Confined Animal Facilities Inspections	<p><b>Objective:</b> Yearly inspections and ratings; Database updates</p> <p><b>Description:</b> Perform inspections of confined animal facilities, projected to occur every 2 years on average</p>	RWQCB-2	Sonoma and Marin Counties	Facilities inspected and in compliance	7/1/03 to 12/31/08
Implement 4.018-3	Confined Animal Facilities Enforcement Activities	<p><b>Objective:</b> Ensure compliance with confined animal facility regulations</p> <p><b>Description:</b> Conduct enforcement actions as needed, and create summary reports on compliance status. Facility inspections are anticipated to lead to phased compliance schedules.</p>	RWQCB-2	Sonoma and Marin Counties	Compliance with regulations	7/1/03 to 12/31/04
Implement 4.031-2	Manage contract on grazing practices	<p><b>Objective:</b> Oversight of contract to address grazing practices and pollution prevention</p> <p><b>Description:</b> Oversee contract and product development</p>	RWQCB-2	Alameda County	Completion of erosion control projects, field tours.	7/1/03 to 6/30/04
Implement 4.033-1	Manage contract for sediment reduction in Sonoma Creek	<p><b>Objective:</b> Oversee contract to complete sediment reduction projects along Sonoma Creek</p> <p><b>Description:</b> Project will implement three sediment reduction projects and develop sediment budget for TMDL on Sonoma Creek</p>	RWQCB-2	Sonoma County	Completion of projects	7/1/03 to 3/30/05

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 4.078-1	Manage contract for vineyard certification program	<p><b>Objective:</b> Oversight of contract that will develop a vineyard certification program in Napa County</p> <p><b>Description:</b> The Napa RCD will implement a vineyard operator certification program similar to the successful "Fish Friendly Farming" program on the North Coast. Vineyard operators will be given planning courses and develop individual facility plans that will be implemented through specific conservation practices.</p>	RWQCB-2	Napa County	Reduction in sediment to creeks	7/1/03 to 12/31/06
Implement 4.084-1	Manage contract on Lagunitas Creek watershed improvement	<p><b>Objective:</b> Oversee contract on development of limiting factors for salmonid fishery on prime coho salmon stream and implementation of erosion control projects</p> <p><b>Description:</b> This project will implement erosion and sediment control projects on San Geronimo and Lagunitas Creeks and conduct a limiting factors assessment to support upcoming TMDLs</p>	RWQCB-2	Marin County	Projects implemented, limiting factors identified	7/1/03 to 12/31/06
Implement 5.125-2	Assist BMP implementation on state and federal lands	<p><b>Objective:</b> Optimize effectiveness of erosion control and grazing BMPs on public lands to assure water quality protection and to provide example of implementation for private land owners.</p> <p><b>Description:</b> Assist state and federal agencies in developing, implementing and evaluating the effectiveness of water quality plans for public lands.</p>	RWQCB-3	Regionwide RB3	Improved surface water discharge/runoff from public lands	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 8.001	Panoche Silver Creek CRMP low flow crossing	<b>Objective:</b> Provide technical support for erosion control low flow crossing installation	RWQCB-5F	Panoche-Silver Creek Watershed	Completed crossing; Reduced sedimentation; Preservation of restoration projects.	8/1/03 to 6/30/08
		<b>Description:</b> Provide technical assistance for the installation of a low flow crossing to reduce down stream sedimentation and erosion and to preserve upstream and downstream restoration projects				
Implement 9.019-2	Upper Pit River Watershed Enhancement and Protection Program	<b>Objective:</b> Riparian restoration and fencing projects.	RWQCB-5R	Regionwide RB8	Enhanced riparian function and habitat. Installation of protective fencing	7/1/03 to 6/30/08
		<b>Description:</b> Riparian restoration and fencing projects				
Track/Monitor 4.003	SWAMP Monitoring	<b>Objective:</b> Generating water quality information for all watersheds in the San Francisco Bay Region within the next 5 to10 years	RWQCB-2	Regionwide RB2	Completion of water quality monitoring programs in target watersheds	7/1/03 to 6/30/08
		<b>Description:</b> Monitor in 3 to 12 watersheds (of about 50- 100 square miles) based on staffing and funding				
Track/Monitor 4.006	Manage contract for Dairy Mgmt & Riparian Protection	<b>Objective:</b> Oversight of contract for implementation of dairy waste management projects and projects directed towards riparian corridor protection.	RWQCB-2	Marin County	Completed projects	7/1/03 to 3/31/05
		<b>Description:</b> Improvements in areas of corral/dry-lot drainage, manure storage area roofing, and gutter installations				



**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Track/Monitor 6.022	McGrath Lake Watershed Phase I	<p><b>Objective:</b> To reduce sediment and contaminant loading of McGrath Lake and the Santa Clara River.</p>	RWQCB-4	Ventura County	Construction of detention basin and continued monitoring.	7/1/03 to 6/30/06
		<p><b>Description:</b> Reconfigure large ag drain, plant native vegetation, and construct detention basins to divert sediment-laden storm flows from entering McGrath Lake, a highly contaminated back-dune coastal lake in the process of being restored. Conduct effectiveness monitoring. Early action project from management plan in development.</p>				

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 1B Facility Wastewater and Runoff from Confined Animal Facilities</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 10.082	Prevent Contaminants from AFO's from entering drinking water	<p><b>Objective:</b> Reduce threats to drinking water quality from AFO's in the San Joaquin basin.</p> <p><b>Description:</b> Monitor ground and surface water contaminants from AFOs; Determine abundance and source of drinking water contaminants (pharmaceuticals, pathogens, nutrients)</p>	RWQCB-5S	San Joaquin watershed	Improved wastewater application practices on at least 60 dairies.	2/1/02 to 3/15/05
Pre-Implementation 2.007	Interagency Confined Animal Coordination Group	<p><b>Objective:</b> Coordinate monthly Interagency Confined Animal Coordination Group meetings and distribute related information to stakeholders.</p> <p><b>Description:</b> Hold periodic interagency meetings to evaluate waste management activities within different animal feeding operation (AFO) sectors and to encourage facility operators to comply with applicable regulations.</p>	SWRCB	Statewide	Compliance by AFO operators with applicable environmental regulations.	7/1/03 to 1/31/06
Pre-Implementation 2.009	Emergency Animal Disposal	<p><b>Objective:</b> Develop guidance document on disposal of animal mortality related to a disease outbreak</p> <p><b>Description:</b> Participate in the Emergency Animal Disposal (EAD) group within Cal-EPA to coordinate carcass disposal practices in the event of a catastrophic event.</p>	SWRCB	Statewide	Guidance is disseminated and utilized	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 2.010-1	Performance for Sustainability - Confined Animals	<p><b>Objective:</b> Participate in the Performance for Sustainability (PFS) group within Cal-EPA to identify non-regulatory methods for achieving enhanced environmental protection at animal feeding operations (AFOs).</p> <p><b>Description:</b> Evaluate non-regulatory measures that will achieve compliance with environmental regulatory requirements at AFOs.</p>	SWRCB	Statewide	Suitable non-regulatory methods for achieving compliance are identified and promulgated.	7/1/03 to 12/31/05
Pre-Implementation 33.001	Partnership Agreement (CA Dairy Quality Assurance Program)	<p><b>Objective:</b> Support and participate in Sonoma-Marín Animal Waste Committee, Dairy Waste Management Partnership Agreement (California Dairy Quality Assurance Program) and producer training through UC.</p> <p><b>Description:</b> Complete dairy waste management training of 50 percent of CDFA inspectors.</p>	DFA	Statewide	Under the Partnership Agreement, complete dairy waste management training	7/1/03 to 6/30/05
Pre-Implementation 4.015-1	Marin-Sonoma Animal Resources Committee	<p><b>Objective:</b> To provide technical assistance to Sonoma-Marín Animal Resources Committee</p> <p><b>Description:</b> Technical input and regulatory oversight related to dairies and other confined animal facilities</p>	RWQCB-2	Marin and Sonoma Counties	Communications with dairy producers	7/1/03 to 12/31/08
Pre-Implementation 4.020-1	TMDL for Pathogens, Petaluma River	<p><b>Objective:</b> Develop and implement TMDL for pathogens in Petaluma River</p> <p><b>Description:</b> Develop and implement TMDL for Petaluma River</p>	RWQCB-2	Sonoma County	Preliminary and final reports, Basin Plan amendment	6/30/04 to 4/30/06

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 4.081	Manage contract on bacterial source ID	<p><b>Objective:</b> Oversee contract to address sources of bacterial contamination that cause beach closures</p> <p><b>Description:</b> This project will address ocean beach and creek closures from pathogens by identifying sources and implementing projects to abate the source pollution. A TMDL is proposed for this watershed in future.</p>	RWQCB-2	San Pedro Creek watershed	Identification of pathogen sources and determination of measures to address	7/1/03 to 12/31/06
Pre-Implementation 4.087-2	TMDL for Pathogens, Sonoma Creek	<p><b>Objective:</b> Develop TMDL for mercury in San Francisco Bay</p> <p><b>Description:</b> Preliminary and final reports and prepare Basin Plan amendment</p>	RWQCB-2	Sonoma County	Reports and Basin Plan amendment	6/30/04 to 4/30/06
Implement 10.010	Improving Dairy Waste Application Practices	<p><b>Objective:</b> Improving dairy waste application practices to protect groundwater quality in the San Joaquin valley</p> <p><b>Description:</b> Secure voluntary implementation of NPS management measures by providing one-on-one mentoring to dairy operators to help them modify wastewater application systems so that they can properly apply their lagoon water to cropland</p>	RWQCB-5S	East Stanislaus County	Implementation of BMPs	7/1/03 to 12/31/04
Implement 10.077	Dairy Nutrient Management	<p><b>Objective:</b> Reduce the impact of nitrate and salts from California's dairies on water quality in the Upper San Joaquin Valley drainage basin</p> <p><b>Description:</b> Secure voluntary implementation of non-point source (NPS) management measures to improve ground and surface water quality, to the benefit of drinking water supplies. Specifically the focus is in the Northern San Joaquin Valley drainage basin where dairy facilities are located on leachable soils with shallow groundwater that are hydrologically connected to the Bay-Delta or municipal and domestic water supply wells.</p>	RWQCB-5S	San Joaquin watershed	Improved wastewater application practices on at least 30 dairies.	7/1/04 to 6/30/06

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 2.012-1	Database/MOU with DFA	<p><b>Objective:</b> Develop a statewide database of information on AFOs and work with the Department of Food and Agriculture to develop a Memorandum of Understanding for periodic transfer of information to maintain the accuracy of the database.</p> <p><b>Description:</b> Develop a database of information on animal feeding operations (AFOs). CDFA has information that the SWRCB and RWQCBs can use in their regulatory programs for AFOs. In the past, DFG has been reluctant to provide the information to the SWRCB or RWQCBs. An MOU is needed to ensure that CDFA provides the information, and a database is needed to make the information available and useful.</p>	SWRCB	Statewide	MOU is developed and implemented. Database is developed and maintained	7/1/03 to 6/30/08
Implement 4.014-1	Manage contract on equestrian manure management	<p><b>Objective:</b> Oversee contract on equestrian manure management</p> <p><b>Description:</b> Contract will implement equestrian Waste Management Demo Sites and develop a Manure Management Strategy.</p>	RWQCB-2	Alameda, Marin, San Mateo, Sonoma Counties	Completion of demonstration sites, preparation of fact sheets and articles	7/1/03 to 12/31/03
Implement 4.016-1	Confined Animal Facility Permit and Waivers	<p><b>Objective:</b> Increase enforcement of AFOs, through Animal Waste Facility Permits and Waivers</p> <p><b>Description:</b> Develop Animal Waste Facility Permit and Waivers.</p>	RWQCB-2	Marin and Sonoma Counties	Completion of dairy waivers, WDRs, issuance of permits to facilities that do not meet waiver conditions.	7/1/03 to 12/31/04
Implement 4.017-1	Confined Animal Facilities Inspections	<p><b>Objective:</b> Yearly inspections and ratings; Database updates</p> <p><b>Description:</b> Perform inspections of confined animal facilities, projected to occur every 2 years on average</p>	RWQCB-2	Sonoma and Marin Counties	Facilities inspected and in compliance	7/1/03 to 12/31/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 4.018-1	Confined Animal Facilities Enforcement Activities	<p><b>Objective:</b> Ensure compliance with confined animal facility regulations</p> <p><b>Description:</b> Conduct enforcement actions as needed, and create summary reports on compliance status. Facility inspections are anticipated to lead to phased compliance schedules.</p>	RWQCB-2	Sonoma and Marin Counties	Compliance with regulations	7/1/03 to 12/31/04
Implement 4.019-1	TMDL for Pathogens, Napa River	<p><b>Objective:</b> Develop and implement TMDL for pathogens on the Napa River</p> <p><b>Description:</b> Develop and implement TMDLs for Napa River and Sonoma Creek</p>	RWQCB-2	Napa County	Completion of TMDL	6/1/04 to 4/30/06
Implement 4.021-1	TMDL for Pathogens, Tomales Bay	<p><b>Objective:</b> Develop and implement TMDL for pathogens on Tomales Bay</p> <p><b>Description:</b> Develop and implement TMDL for Tomales Bay</p>	RWQCB-2	Marin County	Final report, Basin Plan amendment	7/1/03 to 11/30/03
Implement 5.123	Evaluate confined animal facilities for BMPs	<p><b>Objective:</b> Implementation of BMPs to reduce or eliminate water quality impacts associated with confined animal facilities</p> <p><b>Description:</b> Inspect facilities and evaluate BMP implementation summary reports to determine implementation and effectiveness of BMPs</p>	RWQCB-3	Regionwide RB3	Zero contaminated discharge of runoff water to surface waters	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Track/Monitor 10.015	Confined Animal Facility Compliance and Enforcement	<p><b>Objective:</b> Ensure that confined animal facilities do not cause water quality impacts.</p> <p><b>Description:</b> Inspections, responding to complaints, and taking enforcement actions. Cases are taken to the dairy enforcement task unit - made up of representatives from the attorney general's office, the US attorney's office and the county district attorney's office. When all other efforts at controlling NPS pollution fail, the Regional Board will pursue legal prosecution of the responsible parties.</p>	RWQCB-5	Central Valley	Completed inspections. Review of self monitoring reports. Enforcement action, if necessary	7/1/03 to 6/30/08
Track/Monitor 6.004	Stream Team/Horse and Stable BMPs Project	<p><b>Objective:</b> Evaluation of BMPs for horse stable and equestrian facilities.</p> <p><b>Description:</b> This project is a continuation of the citizen water quality monitoring efforts in Malibu Creek Watershed and include site selection and BMPs implementation to reduce runoff from horse stables.</p>	RWQCB-4	Los Angeles County	Water Quality monitoring pre and post for this activity.	4/1/04 to 6/30/05
Track/Monitor 8.004	Confined Animal Facility Compliance and Enforcement	<p><b>Objective:</b> Respond to complaints and conduct compliance inspections</p> <p><b>Description:</b> Includes inspections, responding to complaints, review of reports of waste discharge (WDRs) and taking enforcement actions.</p>	RWQCB-5F	Tulare Lake Basin	Completed compliance inspections; complaint investigations. Review of WDRs. Enforcement action taken	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Report 2.005-1	Evaluate Implemented CAFO Programs at the Regional Level	<p><b>Objective:</b> Obtain information on RWQCB programs for AFOs</p> <p><b>Description:</b> Obtain and summarize information on RWQCB regulatory programs.</p>	SWRCB	Statewide	Information is obtained and presented	7/1/03 to	6/30/08
Report 2.011	Comprehensive Nutrient Management Plans (CNMPs)	<p><b>Objective:</b> Develop guidance document for nutrient management plans.</p> <p><b>Description:</b> Participate in multi-agency workgroup coordinated by the Natural Resources Conservation Service to develop and maintain guidance for preparing Comprehensive Nutrient Management Plans (CNMPs) at AFOs</p>	SWRCB	Statewide	Guidance document is made available for use	7/1/03 to	5/1/08



**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 1C Nutrient Management</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 14.005	Salton Sea Nutrients TMDL	<b>Objective:</b> To develop a Nutrients TMDL for the Salton Sea <b>Description:</b> To develop a TMDL that will include nutrients numeric targets for the Salton Sea, sources and concentrations of nutrients, and an implementation plan	RWQCB-7	Regionwide RB7	Completion of the TMDL	1/1/01 to 12/31/04
Pre-Implementation 2.002	Feed Nutrient Management on Dairy Farms	<b>Objective:</b> Develop guidance for feed management at dairies in order to reduce the nutrient content of the manure that is produced at the facility. <b>Description:</b> Develop and sign contract so that work can begin	SWRCB	Statewide	Signed contract	7/1/03 to 1/30/05
Pre-Implementation 2.010-2	Performance for Sustainability - Confined Animals	<b>Objective:</b> Participate in the Performance for Sustainability (PFS) group within Cal-EPA to identify non-regulatory methods for achieving enhanced environmental protection at animal feeding operations (AFOs). <b>Description:</b> Evaluate non-regulatory measures that will achieve compliance with environmental regulatory requirements at AFOs.	SWRCB	Statewide	Suitable non-regulatory methods for achieving compliance are identified and promulgated.	7/1/03 to 12/31/05
Pre-Implementation 27.012-3	RCD Watershed Coordinator Grants - Phase III	<b>Objective:</b> Document progress achieved with phase III of Resource Conservation Districts (RCD) watershed coordinator grants. <b>Description:</b> Administer RCD watershed coordinator grant program to provide funding to California RCDs to hire watershed coordinators.	DOC	Statewide	Performance measures completed in individual RCD watershed coordinator grants.	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 33.006	Effectiveness of Fertilizer Research and Education Program	<p><b>Objective:</b> To evaluate the effectiveness of Fertilizer Research and Education Program</p> <p><b>Description:</b> Survey targeted areas of the agricultural industry to evaluate effectiveness of the Fertilizer Research and Education Program in promoting the environmentally sound use of fertilizing materials.</p>	DFA	Eastside SJV, South Coast	Complete survey - Dec 2006	7/1/03 to	6/30/08
Pre-Implementation 33.007	Evaluation and Assessment of Regulatory Standards	<p><b>Objective:</b> Evaluate protectiveness to the environment of regulatory standards for arsenic, cadmium and lead in commercial inorganic fertilizers, and assess need for development of standards for other metals of concern and persistent organic pollutants.</p> <p><b>Description:</b> Evaluate and assess.</p>	DFA	Statewide	Complete report by December 31, 2004.	7/1/03 to	6/30/08
Pre-Implementation 33.008	Nutrient-Impaired Waterbodies on CWA 303(d) List	<p><b>Objective:</b> Target nutrient-impaired (as a result of fertilizer use) waterbodies on CWA 303(d) list</p> <p><b>Description:</b> Fund research projects for waterbodies impaired by fertilizer contamination</p>	DFA	Eastside SJV, Central Coast, South Coast	Projects are funded	7/1/03 to	6/30/08
Pre-Implementation 33.009	Program Activities	<p><b>Objective:</b> Coordinate program activities with CDFA Fertilizer Inspection Advisory Board and Technical Advisory Subcommittee.</p> <p><b>Description:</b> Coordinate program activities with CDFA Fertilizer Inspection Advisory Board and Technical Advisory Subcommittee.</p>	DFA	Statewide	Attendance at meetings	7/1/03 to	6/30/08
Pre-Implementation 4.015-2	Marin-Sonoma Animal Resources Committee	<p><b>Objective:</b> To provide technical assistance to Sonoma-Marine Animal Resources Committee</p> <p><b>Description:</b> Technical input and regulatory oversight related to dairies and other confined animal facilities</p>	RWQCB-2	Marin and Sonoma Counties	Communication with dairy producers	7/1/03 to	12/31/08

**Table IIIB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 4.027-1	TMDL for nutrients, Napa River	<p><b>Objective:</b> Develop and implement TMDL</p> <p><b>Description:</b> Develop and implement TMDL for nutrients for Napa River watershed</p>	RWQCB-2	Napa County	Completed TMDL, quantifiable pollutant reduction goals	7/1/03 to 5/30/05
Pre-Implementation 4.089-2	TMDL for Siltation, Tomales Bay	<p><b>Objective:</b> Develop TMDL for sediments for Tomales Bay</p> <p><b>Description:</b> Develop TMDL for sediment from agricultural lands and tributaries to Tomales Bay</p>	RWQCB-2	Marin County	Reports and Basin Plan amendment	6/30/04 to 12/31/06
Implement 10.012-2	Sustainable Cotton Project	<p><b>Objective:</b> Reduce pesticide and nutrient runoff from cotton operations in the San Joaquin valley.</p> <p><b>Description:</b> Implement best management practices on cotton to reduce applications of organophosphate and other pesticides and synthetic fertilizers on cotton crops in priority 1 watersheds in the San Joaquin Valley.</p>	RWQCB-5S	San Joaquin watershed	BMP's implemented.	8/1/01 to 3/31/04
Implement 16.101-1	Dairy Discharge Oversight	<p><b>Objective:</b> To regulate discharges from all large confined animal feeding operations (CAFOS).</p> <p><b>Description:</b> To enforce WDRs for all dairies and some other CAFOs in the San Diego Region.</p>	RWQCB-9	Regionwide - Region 9	Protection and restoration of water quality and beneficial uses in watersheds with CAFO land use activity.	7/1/03 to 6/30/08
Implement 2.012-2	Database/MOU with DFA	<p><b>Objective:</b> Develop a statewide database of information on AFOs and work with the Department of Food and Agriculture to develop a Memorandum of Understanding for periodic transfer of information to maintain the accuracy of the database.</p> <p><b>Description:</b> Develop a database of information on animal feeding operations (AFOs)</p>	SWRCB	Statewide	MOU is developed and implemented. Database is developed and maintained	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 33.003	Fertilizer Research and Education Program	<p><b>Objective:</b> To provide grants to conduct research, establish demonstration projects, and develop education programs to prevent nutrient contamination of surface and ground water.</p> <p><b>Description:</b> Conduct research, outreach, and education for the regulated community through the Fertilizer Research and Education Program.</p>	DFA	Statewide	Number of Workshops; number of publications	7/1/03 to 6/30/08
Implement 33.010	Sampling of Heavy Metals in Fertilizing Materials	<p><b>Objective:</b> Carry out sampling of heavy metals in fertilizing materials.</p> <p><b>Description:</b> Minimum of 150 samples/year of heavy metals in fertilizing materials.</p>	DFA	Statewide	Reported official sample results	7/1/03 to 6/30/08
Implement 4.013-3	Manage contract on citizen monitoring	<p><b>Objective:</b> Oversight of contract to do citizen monitoring and to implement restoration project(s) to reduce sediment loading.</p> <p><b>Description:</b> Grant to do citizen monitoring in the watershed related to nonpoint source pollution, including sedimentation and urban runoff</p>	RWQCB-2	Marin County	Citizen monitoring teams created, sediment control project completed	7/1/03 to 12/31/05
Implement 4.014-3	Manage contract on equestrian manure management	<p><b>Objective:</b> Oversee contract on equestrian manure management</p> <p><b>Description:</b> Contract will implement equestrian Waste Management Demo Sites and develop a Manure Management Strategy.</p>	RWQCB-2	Alameda, Marin, San Mateo, Sonoma Counties	Completion of demonstration sites, preparation of factsheets and articles	7/1/03 to 12/31/03

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 4.016-2	Confined Animal Facility Permit and Waivers	<p><b>Objective:</b> Increase enforcement of AFOs, through Animal Waste Facility Permits and Waivers</p> <p><b>Description:</b> Develop Animal Waste Facility Permit and Waivers.</p>	RWQCB-2	Marin and Sonoma Counties	Completion of dairy waivers, WDRs, issuance of permits to facilities that do not meet waiver conditions.	7/1/03 to 12/31/04
Implement 4.017-3	Confined Animal Facilities Inspections	<p><b>Objective:</b> Yearly inspections and ratings; Database updates</p> <p><b>Description:</b> Perform inspections of confined animal facilities, projected to occur every 2 years on average</p>	RWQCB-2	Sonoma and Marin Counties	Facilities inspected and in compliance	7/1/03 to 12/31/08
Implement 4.018-2	Confined Animal Facilities Enforcement Activities	<p><b>Objective:</b> Ensure compliance with confined animal facility regulations</p> <p><b>Description:</b> Conduct enforcement actions as needed, and create summary reports on compliance status. Facility inspections are anticipated to lead to phased compliance schedules.</p>	RWQCB-2	Sonoma and Marin Counties	Compliance with regulations	7/1/03 to 12/31/04
Implement 4.022-1	TMDL for nutrients, Petaluma River	<p><b>Objective:</b> Develop and implement TMDL</p> <p><b>Description:</b> Develop and implement TMDL for nutrients in Petaluma River watershed</p>	RWQCB-2	Sonoma County	Preliminary and final reports, Basin Plan amendment	7/1/04 to 6/30/07
Implement 4.023-1	TMDL for nutrients, Walker Creek	<p><b>Objective:</b> Develop and implement TMDL</p> <p><b>Description:</b> Develop and implement TMDL for nutrients in Walker Creek watershed</p>	RWQCB-2	Marin County	Completed TMDL reports, Basin Plan amendment	7/1/04 to 6/30/07

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 4.024-1	TMDL for nutrients, Tomales Bay	<b>Objective:</b> Develop and implement TMDL  <b>Description:</b> Develop and implement nutrient TMDL for Tomales Bay	RWQCB-2	Marin County	Preliminary and final TMDL reports, Basin Plan amendment	7/1/04 to 6/30/07
Implement 4.026-1	TMDL for nutrients, Suisun Marsh	<b>Objective:</b> Develop and implement TMDL  <b>Description:</b> Develop and implement TMDL for Suisun Marsh	RWQCB-2	Solano County	TMDL preliminary and final reports, Basin Plan amendment	6/1/06 to 6/30/08
Implement 4.028-1	TMDL for nutrients, Sonoma Creek	<b>Objective:</b> Develop and implement TMDL  <b>Description:</b> Develop and implement TMDL for nutrients for Sonoma Creek	RWQCB-2	Sonoma County	Completed TMDL, quantifiable pollutant reduction goals	7/1/03 to 6/30/05
Implement 4.084-2	Manage contract on Lagunitas Creek watershed improvement	<b>Objective:</b> Oversee contract on development of limiting factors for salmonid fishery on prime coho salmon stream and implementation of erosion control projects  <b>Description:</b> This project will implement erosion and sediment control projects on San Geronimo and Lagunitas Creeks and conduct a limiting factors assessment to support upcoming TMDLs	RWQCB-2	Marin County	Projects implemented, limiting factors identified	7/1/03 to 12/31/06
Implement 5.121	Evaluate greenhouses for BMPs	<b>Objective:</b> Convert all green house operations to recycling of waste water.  <b>Description:</b> Inspect facilities and evaluate BMP implementation summary reports to determine implementation and effectiveness of BMPs	RWQCB-3	Regionwide RB3	Zero contaminated discharge of green house waste water to surface waters	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Report 2.005-2	Evaluate Implemented CAFO Programs at the Regional Level	<p><b>Objective:</b> Obtain information on RWQCB programs for AFOs</p> <p><b>Description:</b> Obtain and summarize information on RWQCB regulatory programs.</p>	SWRCB	Statewide	Information is obtained and presented	7/1/03 to 6/30/08
-------------------	--	--	-------	-----------	--	-------------------

**Table IIIB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 1D Pesticide Management</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 10.005	SRWP Organophosphate Pesticide Focus Group	<p><b>Objective:</b> Reduce pesticides in the Sacramento River and tributaries through the stakeholder process.</p> <p><b>Description:</b> Participate in focus group to develop a strategy to protect the main stem Sacramento and Feather Rivers from adverse effects of diazinon applied to dormant orchards and other sources. Collaborate with other stakeholder groups, including the SRWP Toxics Subcommittee and others.</p>	RWQCB-5S	Sacramento River Watershed	Agendas prepared and meetings attended. Strategy documents completed.	7/1/03 to 6/30/08
Pre-Implementation 10.035	Sacramento and Feather River Diazinon TMDL	<p><b>Objective:</b> Reduce diazinon in the Sacramento and Feather rivers.</p> <p><b>Description:</b> Implementation to begin in 2004. More information can be found at: <a href="http://www.swrcb.ca.gov/~rwqcb5/programs/tmdl/sac_feather_diaz/index.html">http://www.swrcb.ca.gov/~rwqcb5/programs/tmdl/sac_feather_diaz/index.html</a></p>	RWQCB-5S	Regionwide RB5	Reduction in diazinon concentrations	7/1/03 to 6/30/08
Pre-Implementation 18.006	MAA implementation	<p><b>Objective:</b> Prevent and mitigate threats to ground and surface water quality by coordination with SWRCB and RWQCBs</p> <p><b>Description:</b> Prevent and mitigate threats to ground and surface water quality by coordination with SWRCB and RWQCBs</p>	CDPR	Statewide	Completed MAA	7/1/03 to 6/30/08



**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 18.010	Dormant Spray Monitoring	<p><b>Objective:</b> Evaluate effectiveness of vegetated buffer strips and post-application tillage as means to reduce runoff of diazinon dormant spray from treated orchards.</p> <p><b>Description:</b> Collect orchard runoff samples and perform chemical analysis for diazinon. Adequate flow data will be collected to allow for the calculation of mass loads in the runoff from study plots.</p>	CDPR	Butte County	Completed sampling and analysis of data	5/25/02 to	9/1/04
Pre-Implementation 18.011	Correlation Analysis	<p><b>Objective:</b> To derive empirical equations to relate pesticides loading in the Sacramento and San Joaquin rivers to the two predictor environmental variables: the precipitation and pesticide use.</p> <p><b>Description:</b> Historic data of SURF (a surface water monitoring database), PUR (Pesticide Use Report), precipitation, and river flow will be queried. A statistical model will be formulated, and subsequently applied to analyze and synthesize the relevant data.</p>	CDPR	Sacramento and San Joaquin Rivers	Compilation and publication of the model	7/1/03 to	2/28/08
Pre-Implementation 18.012	Pyrethroid Monitoring--Central Valley	<p><b>Objective:</b> determine if esfenvalerate and permethrin are moving offsite into surface waters in measurable amounts, and if so, what is the typical range of concentrations that may be observed.</p> <p><b>Description:</b> Monitoring the occurrence and concentration of esfenvalerate and permethrin pyrethroids</p>	CDPR	Sacramento & San Joaquin basins	Completed study and preparation of final report	10/1/03 to	12/31/03
Pre-Implementation 18.013	Pyrethroid Monitoring--Glenn County	<p><b>Objective:</b> The objective of this study is to evaluate the potential for runoff of esfenvalerate from dormant-season applications in prune orchards with managed floors.</p> <p><b>Description:</b> Monitoring of in-field and edge-of-field esfenvalerate concentrations during runoff event.</p>	CDPR	Glenn County	Sufficient rainfall event following pesticide application.	11/11/02 to	9/30/03

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 2.014-1	Promote Management Practices	<p><b>Objective:</b> Reduce pesticides in both agricultural and urban surface waters through local outreach to promote MPs that reduce pesticide runoff and through CDPR's registration process.</p> <p><b>Description:</b> Fund and assist in pesticide control applicator and grower training promoting pesticide management. Mitigate impacts through self-regulation as well as regulatory authorities of CDPR, SWRCB, and RWQCB.</p>	SWRCB	Statewide	Completion of MP, effective research	7/1/03 to 6/30/08
Pre-Implementation 2.016	Water Quality Sampling Program Review	<p><b>Objective:</b> Monitor and review the water quality sampling program for control of red imported fire ants.</p> <p><b>Description:</b> Comment on monitoring results of RIFA pesticide treatments</p>	SWRCB	Statewide	Complete review of monitoring design and results	7/1/03 to 6/30/08
Pre-Implementation 2.017	Process for Responding to Presence of Pesticides.....	<p><b>Objective:</b> Coordinate with the RWQCBs and CDPR to implement CDPR's new "Process for Responding to the Presence of Pesticides in Surface Water."</p> <p><b>Description:</b> Continue coordination with CDPR and RBs to ensure the Process meets TMDL implementation needs</p>	SWRCB	Statewide	Consistency of Process with TMDL implementation	7/1/03 to 6/30/08
Pre-Implementation 2.030-2	Performance for Sustainability Vineyard/Winery Workgroup	<p><b>Objective:</b> To enhance environmental protection by convening a partnership devoted to applying the principle of sustainable development in California wine production.</p> <p><b>Description:</b> Develop a model for incorporating sustainability principles into localized decision making.</p>	SWRCB	Unknown at this time	Partnership results in implementation of sustainable vineyard/winery practices in California	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 33.004-1	NPS Pollution in Pest Eradication Programs	<p><b>Objective:</b> Minimize/avoid NPS pollution in pest eradication programs. Consult with RWQCBs and SWRCB when developing programs.</p> <p><b>Description:</b> Consultation with Federal, State and local agencies to develop protocol.</p>	DFA	Statewide	Minimized impacts of pesticide treatment.	7/1/03 to 6/30/08
Implement 10.011	BMP Implementation to Mitigate OP Pesticide Runoff	<p><b>Objective:</b> Determine which practices are effective in reducing pesticide runoff and provide public outreach.</p> <p><b>Description:</b> Implement management practices in orchard crops to reduce OP pesticide surface water contamination from orchard dormant sprays.</p>	RWQCB-5S	Sacramento River watershed	Implementation of projects.	11/1/01 to 10/31/04
Implement 10.012-1	Sustainable Cotton Project	<p><b>Objective:</b> Reduce pesticide and nutrient runoff from cotton operations in the San Joaquin valley.</p> <p><b>Description:</b> Implement best management practices on cotton to reduce applications of organophosphate and other pesticides and synthetic fertilizers on cotton crops in priority 1 watersheds in the San Joaquin Valley.</p>	RWQCB-5S	San Joaquin watershed	BMP's implemented.	8/1/01 to 3/31/04
Implement 10.029	San Joaquin River OP Pesticide TMDL	<p><b>Objective:</b> Begin implementation of the OP Pesticide TMDL for the San Joaquin River.</p> <p><b>Description:</b> TMDL implementation is scheduled to start in 2003. More information at: <a href="http://www.swrcb.ca.gov/~rwqcb5/programs/tmdl/sjrop.html">http://www.swrcb.ca.gov/~rwqcb5/programs/tmdl/sjrop.html</a></p>	RWQCB-5S	Regionwide RB5	Reduction in loads of OP pesticides to Sacramento and Feather Rivers	7/1/04 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 16.101-2	Dairy Discharge Oversight	<p><b>Objective:</b> To regulate discharges from all large confined animal feeding operations (CAFOS).</p> <p><b>Description:</b> To enforce WDRs for all dairies and some other CAFOs in the San Diego Region.</p>	RWQCB-9	Regionwide - Region 9	Protection and restoration of water quality and beneficial uses in watersheds with CAFO land use activity.	7/1/03 to 6/30/08
Implement 18.002-1	Rice Pesticides Program	<p><b>Objective:</b> Reduce rice pesticide loading in Sacramento and San Joaquin basins</p> <p><b>Description:</b> Develop and implement management methods for water in treated fields to reduce or eliminate discharges; develop and implement methods to reduce drift from applications</p>	CDPR	Sacramento & San Joaquin Valleys	No violations of water quality objectives	7/1/03 to 6/30/08
Implement 3.12-3	Fish Friendly Farming	<p><b>Objective:</b> Promote vineyard construction, operation, and maintenance in a manner that is protective of water quality - to improve water quality and to restore and sustain habitat for federally listed salmonids.</p> <p><b>Description:</b> outreach/educational activities; farm conservation plan review; site inspections</p>	RWQCB-1	Sonoma and Mendocino Counties	Improved water quality	1/1/02 to 6/30/08
Implement 4.078-2	Manage contract for vineyard certification program	<p><b>Objective:</b> Oversight of contract that will develop a vineyard certification program in Napa County</p> <p><b>Description:</b> The Napa RCD will implement a vineyard operator certification program similar to the successful "Fish Friendly Farming" program on the North Coast. Vineyard operators will be given planning courses and develop individual facility plans that will be implemented through specific conservation practices.</p>	RWQCB-2	Napa County	Reduction in sediment to creeks, reduction in pesticide use	7/1/03 to 12/31/06

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Track/Monitor 18.005	Surface Water Database	<p><b>Objective:</b> To maintain the Department of Pesticide Regulation Surface Water Database with environmental monitoring results of pesticides in California surface waters.</p> <p><b>Description:</b> The Department of Pesticide Regulation maintains a Surface Water Database containing data from a wide variety of environmental monitoring studies, all designed to test for the presence or absence of pesticides in California surface waters. Gather and enter data, update data query pages</p>	CDPR	Statewide	Publication of bi-annual updated Web pages	7/1/03 to 6/30/08
Track/Monitor 18.008	Monitoring Chlorpyrifos and Diazinon--Salinas	<p><b>Objective:</b> To clarify the linkage between urban and agricultural sources of diazinon and chlorpyrifos and their fate in receiving waters.</p> <p><b>Description:</b> Measure the concentrations of diazinon and chlorpyrifos in the water column and in sediments at nine sites within the Monterey Bay watershed over a two-year period. Monitoring will be conducted both during the irrigation season and during winter storm events.</p>	CDPR	Lower Salinas River	Completed monitoring and published report	4/22/02 to 3/31/04
Track/Monitor 18.009	Bioassessment research	<p><b>Objective:</b> To Develop staff familiarity with bioassessment methodology and establish baseline aquatic biological community structure and physical habitat conditions in wadeable, agriculture dominated surface waters.</p> <p><b>Description:</b> In cooperation with CVRWQCB, DPR will monitor and assess not more than 10 sites in the Sacramento and San Joaquin watershed. A physical habitat assessment will be completed for each reach sampled. Water samples will also be collected from each sampling site and analyzed for selected organophosphates (OPs), esfenvalerate and permethrin (PY), and selected triazines (TRs).</p>	CDPR	Central Valley	Established SOPs, sampling sites, and complete sampling and reporting	4/1/02 to 4/30/04

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Track/Monitor 2.015	Rice Pesticide Management	<p><b>Objective:</b>            Reduce rice pesticide loading in the Sacramento and SJ Rivers by managing water in treated fields so that discharges of pesticide into surface waters do not impair beneficial uses.</p> <p><b>Description:</b>            Implement rice pesticide MP as specified in permit</p>	SWRCB	Sacramento and San Joaquin River Valleys	Prevention of exceedences of rice pesticide water quality objectives	7/1/03 to 6/30/08
Report 18.001	Groundwater database	<p><b>Objective:</b>            Develop and maintain database on the results of monitoirng of ground water for pesticides</p> <p><b>Description:</b>            Collect data, verify, enter into database, prepare annual report as required by law</p>	CDPR	Statewide	Preparation of annual report within statutory deadline	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 1E Grazing Management</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 11.27-1	Bridgeport Reservoir Nutrient TMDL	<b>Objective:</b> Watershed restoration through the TMDL process <b>Description:</b> Complete and implement the TMDL	RWQCB-6	Mono County	completed TMDL	7/1/03 to 1/1/05
Pre-Implementation 11.38	Skedaddle Creek Pathogen TMDL	<b>Objective:</b> watershed restoration through the TMDL program <b>Description:</b> Complete and implement the TMDL	RWQCB-6	Lassen County	completed TMDL	1/1/03 to 1/1/06
Pre-Implementation 11.42	Eagle Lake Nutrient TMDL	<b>Objective:</b> watershed restoration through the TMDL program <b>Description:</b> Complete and implement the TMDL	RWQCB-6	Lassen County	completed TMDL	1/1/05 to 1/1/08
Pre-Implementation 11.45	Goodale Creek Sediment TMDL	<b>Objective:</b> watershed restoration through the TMDL program <b>Description:</b> Complete and implement the TMDL	RWQCB-6	Inyo County	completed TMDL	1/1/06 to 1/1/09
Pre-Implementation 11.48	Mill Creek Sediment TMDL	<b>Objective:</b> watershed restoration through the TMDL program <b>Description:</b> Complete and implement the TMDL	RWQCB-6	Modoc County	completed TMDL	1/1/07 to 1/1/10
Pre-Implementation 11.49	Wolf Creek Sediment TMDL	<b>Objective:</b> watershed restoration through the TMDL program <b>Description:</b> Complete and implement the TMDL	RWQCB-6	Alpine County	completed TMDL	1/1/07 to 1/1/10

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 2.019-1	MAA and WQMP with BLM	<p><b>Objective:</b> Continue development of MAA and WQMP with the Bureau of Land Management (BLM).</p> <p><b>Description:</b> Facilitate meetings, and negotiate terms of MAA and appropriate WQMP with BLM staff</p>	SWRCB	Statewide, BLM lands	Completed MAA and WQMP	7/1/03 to	6/30/08
Pre-Implementation 4.090-2	TMDL for Siltation, Walker Creek	<p><b>Objective:</b> Develop TMDL for sediments for Walker Creek</p> <p><b>Description:</b> Develop TMDL for sediment from agricultural lands on Walker Creek, major tributary to Tomales Bay</p>	RWQCB-2	Marin County	Reports and Basin Plan amendment	6/30/05 to	4/30/07
Pre-Implementation 4.091-2	TMDL for Mercury, Walker Creek	<p><b>Objective:</b> Develop TMDL for mercury for Walker Creek</p> <p><b>Description:</b> Develop TMDL for mercury from old mercury mine in upper watershed of Walker Creek, major tributary to Tomales Bay</p>	RWQCB-2	Marin County	Reports and Basin Plan amendment	7/1/03 to	3/31/05
Pre-Implementation 4.092-2	TMDL for Siltation, Petaluma River	<p><b>Objective:</b> Develop TMDL for sediments in Petaluma River watershed</p> <p><b>Description:</b> Develop TMDL for sediment from agricultural activities (dairies, ranching, vineyards)</p>	RWQCB-2	Sonoma County	Reports and Basin Plan amendment	7/1/04 to	6/30/07
Pre-Implementation 5.124	Evaluate grazing areas for BMPs	<p><b>Objective:</b> Optimize effectiveness of grazing BMPs for water quality protection</p> <p><b>Description:</b> Inspect facilities and evaluate BMP implementation summary reports to determine implementation and effectiveness of BMPs</p>	RWQCB-3	Regionwide RB3	Improved surface water discharge/runoff from grazing lands	7/1/03 to	6/30/08



**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 8.005-1	Arroyo Pasajero CRMP - Domingene Watershed Assessment	<p><b>Objective:</b> Provide technical assistance to the development of the Domingene Watershed Assessment</p> <p><b>Description:</b> Provide technical assistance to the CRMP in the development of the Domingene Watershed Assessment</p>	RWQCB-5F	Westside of Tulare Lake Basin	Completion of the Watershed Assessment	12/31/03 to 12/31/05
Pre-Implementation 9.008	Rangeland Water Quality Management Plan	<p><b>Objective:</b> Outreach, education, technical assistance, monitoring.</p> <p><b>Description:</b> Outreach, education, monitoring</p>	RWQCB-5R	Sacramento River watershed	completion of outreach and monitoring.	7/1/03 to 6/30/08
Implement 11.14-1	Rangeland BMPS West Walker River	<p><b>Objective:</b> To improve watershed conditions in a grazed area</p> <p><b>Description:</b> implementing rangeland BMPs such as installing fencing, changes in grazing patterns, directing access, revegetation</p>	RWQCB-6	Mono County	instream and riparian habitat improvement	8/1/99 to 12/31/03
Implement 11.34	Bodie Creek Metals TMDL	<p><b>Objective:</b> watershed restoration through the TMDL program</p> <p><b>Description:</b> Complete and implement the TMDL</p>	RWQCB-6	Mono County	completed TMDL	1/1/02 to 1/1/05
Implement 2.018-31	U.C. Rangeland Water Quality Workshops, Task 3	<p><b>Objective:</b> Educate rangeland owners, ranch operators, and others about protecting rangeland water quality through improved grazing practices and monitoring.</p> <p><b>Description:</b> Plan and conduct workshops</p>	SWRCB	Statewide Private Rangelands	Completed workshops; improved practices	1/1/01 to 6/30/08
Implement 2.018-41	U.C. Rangeland Water Quality Workshops, Task 4	<p><b>Objective:</b> Educate rangeland owners, ranch operators, and others about protecting rangeland water quality through improved grazing practices and monitoring.</p> <p><b>Description:</b> Survey workshops and participants regarding practice implementation.</p>	SWRCB	Statewide, Private Rangelands	Completed survey	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 2.020	Range Management Advisory Committee	<p><b>Objective:</b> Work with RMAC to resolve deficiencies in the Rangeland Water Quality Management Plan (RWQMP)</p> <p><b>Description:</b> Participate in the Range Management Advisory Committee (RMAC) to the BOF</p>	SWRCB	Statewide, Private Rangelands	Improvements in RWQMP and consistency with NPS Plan	7/1/03 to 6/30/08
Implement 4.001-2	TMDL for siltation, Napa River	<p><b>Objective:</b> Develop and implement TMDL for siltation at Napa River Watershed</p> <p><b>Description:</b> Develop and implement TMDL for siltation in Napa River Watershed</p>	RWQCB-2	Napa County	Completed TMDL, project report, final report, Basin Plan amendment.	7/1/03 to 5/31/05
Implement 4.002-2	TMDL for siltation, Sonoma Creek	<p><b>Objective:</b> Develop and implement TMDL for siltation in Sonoma Creek</p> <p><b>Description:</b> Develop and implement TMDL for siltation in Sonoma Creek Watershed</p>	RWQCB-2	Sonoma Creek Watershed	Preliminary and final project reports, Basin Plan amendment	7/1/03 to 6/30/05
Implement 4.007-2	TMDL for Siltation, Pescadero Butano	<p><b>Objective:</b> Develop and implement TMDL for siltation in Pescadero and Butano watersheds</p> <p><b>Description:</b> Develop and implement TMDL for siltation in Pescadero/Butano Watersheds</p>	RWQCB-2	San Mateo County	Preliminary and final project reports, Basin Plan amendment	7/1/04 to 6/30/07
Implement 4.008-2	TMDL for Siltation, Lagunitas Creek	<p><b>Objective:</b> Develop and implement TMDL for siltation at Lagunitas Creek</p> <p><b>Description:</b> Develop and implement TMDL for Lagunitas Creek</p>	RWQCB-2	Lagunitas Creek	Preliminary and final project reports, Basin Plan amendment	6/1/04 to 4/30/07

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 4.009-2	TMDL for Siltation, San Gregorio Creek	<p><b>Objective:</b> Develop and implement TMDL for siltation at San Gregorio Creek</p> <p><b>Description:</b> Develop and implement TMDL for San Gregorio Creek</p>	RWQCB-2	San Gregorio Creek	Preliminary and final project reports, Basin Plan amendment	7/1/04 to 6/30/07
Implement 4.014-2	Manage contract on equestrian manure management	<p><b>Objective:</b> Oversee contract on equestrian manure management</p> <p><b>Description:</b> Contract will implement equestrian Waste Management Demo Sites and develop a Manure Management Strategy.</p>	RWQCB-2	Alameda, Marin, San Mateo, Sonoma Counties	Completion of demonstration sites, preparation of factsheets and articles	7/1/03 to 12/31/03
Implement 4.019-3	TMDL for Pathogens, Napa River	<p><b>Objective:</b> Develop and implement TMDL for pathogens on the Napa River</p> <p><b>Description:</b> Develop and implement TMDLs for Napa River and Sonoma Creek</p>	RWQCB-2	Napa County	Completion of TMDL	6/1/04 to 4/30/06
Implement 4.024-2	TMDL for nutrients, Tomales Bay	<p><b>Objective:</b> Develop and implement TMDL</p> <p><b>Description:</b> Develop and implement nutrient TMDL for Tomales Bay</p>	RWQCB-2	Marin County	Preliminary and final TMDL reports, Basin Plan amendment	7/1/04 to 6/30/07
Implement 4.031-1	Manage contract on grazing practices	<p><b>Objective:</b> Oversight of contract to address grazing practices and pollution prevention</p> <p><b>Description:</b> Oversee contract and product development</p>	RWQCB-2	Alameda County	Completion of erosion control projects, field tours.	7/1/03 to 6/30/04

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 5.125-1	Assist BMP implementation on state and federal lands	<p><b>Objective:</b> Optimize effectiveness of erosion control and grazing BMPs on public lands to assure water quality protection and to provide example of implementation for private land owners.</p> <p><b>Description:</b> Assist state and federal agencies in developing, implementing and evaluating the effectiveness of water quality plans for public lands.</p>	RWQCB-3	Regionwide RB3	Improved surface water discharge/runoff from public lands	7/1/03 to 6/30/08
Implement 9.019-1	Upper Pit River Watershed Enhancement and Protection Program	<p><b>Objective:</b> Riparian restoration and fencing projects.</p> <p><b>Description:</b> Riparian restoration and fencing projects</p>	RWQCB-5R	Modoc and Lassen Counties	Enhanced riparian function and habitat. Installation of protective fencing	7/1/03 to 6/30/08
Track/Monitor 11.59	Upper Truckee River Grazing Monitoring	<p><b>Objective:</b> To use monitoring data to provide feedback for improved BMPs.</p> <p><b>Description:</b> NPS water quality monitoring upstream and downstream of grazing areas.</p>	RWQCB-6	El Dorado County	Data that shows no impact from grazing.	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 1F Irrigation Water Management</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 10.078	San Luis Drain Oxygen Demand Reduction Project	<p><b>Objective:</b> Reduce algal inputs from San Luis Drain to San Joaquin River</p> <p><b>Description:</b> Conduct an investigation of algal growth patterns and nutrient concentrations in the San Luis Drain (SLD) to determine what is currently limiting algal growth in this system; and determine what engineering approach (e.g. precipitation, sequestration, filtration, etc.) could be used to remove this limited nutrient from agricultural water entering the SLD. Conduct laboratory and field studies to determine which approach will be most effective for controlling algae under the unique conditions of the SLD. The results of this study will be integrated with other studies examining the treatment of agricultural drainage and used in the conceptual design of a full-scale treatment process for agricultural waste entering the SLD.</p>	RWQCB-5S	San Joaquin watershed	Completed investigation; reduction of algae	7/1/03 to 6/30/08
Pre-Implementation 11.27-2	Bridgeport Reservoir Nutrient TMDL	<p><b>Objective:</b> watershed restoration through the TMDL process</p> <p><b>Description:</b> Complete and implement the TMDL</p>	RWQCB-6	Mono County	completed TMDL	7/1/03 to 1/1/05
Pre-Implementation 11.39	Susan River TMDL	<p><b>Objective:</b> Watershed restoration through the TMDL program</p> <p><b>Description:</b> Complete and implement the TMDL for unknown toxicity</p>	RWQCB-6	Lassen County	completed TMDL	1/1/04 to 1/1/07

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 2.023	Drainage Management and Control	<p><b>Objective:</b> Support drainage management and control activities through participation in the San Joaquin Valley Drainage Implementation Program (SJVDIP) and San Joaquin Valley Drainage Authority (SJVDA).</p> <p><b>Description:</b> Participate in the San Joaquin Valley Drainage Implementation Program (SJVDIP) and San Joaquin Valley Drainage Authority (SJVDA).</p>	SWRCB	Westside San Joaquin Valley/Tulare Basin	Coordination achieved and projects implemented	7/1/03 to 6/30/08
Pre-Implementation 33.005	Toxic Elements in Ground Water	<p><b>Objective:</b> Manage and reduce toxic elements in drainage water.</p> <p><b>Description:</b> Develop methods and practices to manage and reduce toxic elements in drainage water.</p>	DFA	San Joaquin Valley	Documentation of feasible methods.	7/1/03 to 6/30/06
Pre-Implementation 10.081	Orestimba Creek Watershed - Ag Water Quality Pilot Project	<p><b>Objective:</b> Reduce pesticide and nutrient contamination in Orestimba Creek.</p> <p><b>Description:</b> Initiate planning and design of management practices on commercial farming operations and treatment technologies with high potential for reducing or eliminating pesticide, nutrient and other contaminant loads carried by irrigation return flows into the Orestimba Creek and subsequently the SJR.</p>	RWQCB-5S	Orestimba Creek	Development and design of a filtration treatment system.	7/1/04 to 6/30/07
Implement 10.028	San Joaquin River Salt and Boron TMDL	<p><b>Objective:</b> Meet salt and boron objectives in the San Joaquin River</p> <p><b>Description:</b> TMDL implementation is scheduled to start in 2003. More information at: <a href="http://www.swrcb.ca.gov/~rwqcb5/programs/tmdl/Salt_Boron.htm">http://www.swrcb.ca.gov/~rwqcb5/programs/tmdl/Salt_Boron.htm</a></p>	RWQCB-5S	San Joaquin River watershed	Reduction in salt and boron loads to the San Joaquin River.	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 10.076	Control of Agricultural Runoff	<p><b>Objective:</b> Improve quality of water discharged into the Turlock Irrigation District system.</p> <p><b>Description:</b> Requiring that all discharges meet the applicable local, state or federal water quality standards at the point of discharge into the system. The program focuses on ensuring the grower has both the physical and operational tools necessary to meet water quality standards at the point where it leaves the field and enters the TID system.</p>	RWQCB-5S	San Joaquin watershed	Outreach program and on-farm improvements implemented.	7/1/04 to	6/30/07
Implement 18.002-2	Rice Pesticides Program	<p><b>Objective:</b> Reduce rice pesticide loading in Sacramento and San Joaquin basins</p> <p><b>Description:</b> Develop and implement management methods for water in treated fields to reduce or eliminate discharges; develop and implement methods to reduce drift from applications</p>	CDPR	Sacramento & San Joaquin Valleys	No violations of water quality objectives	7/1/03 to	6/30/08
Implement 18.004	Chemigation outreach	<p><b>Objective:</b> Develop mobile outreach program to demonstrate approved chemigation systems to prevent groundwater contamination</p> <p><b>Description:</b> Develop mobile outreach program to demonstrate approved chemigation systems to prevent groundwater contamination</p>	CDPR	Central Valley	Mobile outreach programs	7/1/03 to	6/30/08
Implement 19.002-2	Napa Vineyard Erosion Control Watershed Project	<p><b>Objective:</b> Using compost and mulch in hillside vineyard growing operations to mitigate erosion of sediments into local watershed.</p> <p><b>Description:</b> Promote systematic use of compost and mulch to vineyards in Napa Watershed and disseminate outreach information on application techniques.</p>	CIWMB	Napa	Increased utilization of compost and mulch in normal vineyard growing operations.	7/1/03 to	7/1/05

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 2.024	SB 1372 Regulations	<p><b>Objective:</b> Develop regulations for design, construction, operation and closure of solar evaporators at Integrated On-farm Drainage Management facilities pursuant to SB 1372.</p> <p><b>Description:</b> Develop new regulations</p>	SWRCB	Westside San Joaquin Valley/Tulare Basin	Adoption and successful implementation of new regulations	7/1/03 to 6/30/08
Implement 5.122	Evaluate irrigated ag areas for MP effectiveness	<p><b>Objective:</b> Implementation of BMPs to reduce/eliminate water quality impacts associated with irrigated agriculture</p> <p><b>Description:</b> Inspect facilities and evaluate BMP implementation summary reports to determine implementation and effectiveness of BMPs</p>	RWQCB-3	Regionwide RB3	Zero discharge of ag irrigation tail water to surface waters	7/1/03 to 6/30/08
Implement 6.052-2	TMDL Implentation for Santa Clara River-Chloride	<p><b>Objective:</b> MP implementation</p> <p><b>Description:</b> Develop TMDL implementation plan and reshedule of implementation</p>	RWQCB-4	Ventura County	Delisting on 303 (d) list	7/1/03 to 6/30/08
Implement 7.037	Irrigation Return Flow Agricultural Waiver Program	<p><b>Objective:</b> To manage discharges from irrigated lands to assure that such discharges do not cause or contribute to conditions of pollution or nuisance as defined in Section 13050 of the California Water Code and do not cause or contribute to exceedances of any Regional, State, or Federal numeric or narrative water quality standard.</p> <p><b>Description:</b> This waiver would set forth two categories of waivers of WDRs. 1) dischargers who participate in a group effort on a watershed level to comply with the conditions of the waiver. 2) individual dischargers who do not participate in a group watershed or subwatershed effort. The dischargers must comply with the waiver conditions.</p>	RWQCB-5	Central Valley	Implementation of waivers for irrigated agriculture	7/1/03 to 6/30/08



**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Report 2.022	MPs for Selenium Control	<p><b>Objective:</b> Support development of management practices (MPs) for control of selenium in agricultural drainage through contracts with UC.</p> <p><b>Description:</b> Research and pilot projects contracts. Develop final reports detailing implementable selenium management and regulation processes</p>	SWRCB	Westside San Joaquin Valley/Tulare Basin	Final reports detailing implementable selenium management and regulation processes	7/1/03 to	3/1/05
Report 6.061	ACL 98-079 Las Virgines MWD SEP	<p><b>Objective:</b> Study irrigation and fertilization methods to quantify the benefits of reclaimed water use in Lake Sherwood.</p> <p><b>Description:</b> The field tests will evaluate the efficacy of water blending and improved drainage in comparison with use of potable water. The objective is to maintain a low level of salt (&lt;700 ppm) in the root zone which will sustain healthy, playable turf year round. Test variables will be drainage and water type (reclaimed, potable and fertilizer applied water). The waters will be sampled quarterly to verify whether or not the nutrient content of reclaimed water will offset fertilizer costs.</p>	RWQCB-4	Calabasas	Quarterly sampling. Completed Efficacy Evaluation	7/1/03 to	6/30/04

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 1G Education/Outreach</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 2.003	Statewide Training for BMP Related Permit Coordination	<b>Objective:</b> Statewide Training for BMP Related Permit Coordination in Priority Watersheds/Sustainable Conservation <b>Description:</b> Revise Scope of Work (SOW) and budget	SWRCB	Multiple counties	Approved SOW and budget	6/1/03 to 7/1/04
Pre-Implementation 2.014-2	Promote Management Practices	<b>Objective:</b> Reduce pesticides in both agricultural and urban surface waters through local outreach to promote MPs that reduce pesticide runoff and through CDPR's registration process. <b>Description:</b> Fund and assist in pesticide control applicator and grower training promoting pesticide management. Mitigate impacts through self-regulation as well as regulatory authorities of CDPR, SWRCB, and RWQCB.	SWRCB	Statewide	Completion of MP, effective research	7/1/03 to 6/30/08
Pre-Implementation 27.012-1	RCD Watershed Coordinator Grants - Phase III	<b>Objective:</b> Document progress achieved with phase III of Resource Conservation Districts (RCD) watershed coordinator grants. <b>Description:</b> Administer RCD watershed coordinator grant program to provide funding to California RCDs to hire watershed coordinators.	DOC	Statewide	Performance measures completed in individual RCD watershed coordinator grants.	7/1/03 to 6/30/08
Pre-Implementation 4.015-3	Marin-Sonoma Animal Resources Committee	<b>Objective:</b> To provide technical assistance to Sonoma-Marine Animal Resources Committee <b>Description:</b> Technical input and regulatory oversight related to dairies and other confined animal facilities	RWQCB-2	Marin and Sonoma Counties	Communication with dairy producers	7/1/03 to 12/31/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 4.020-2	TMDL for Pathogens, Petaluma River	<p><b>Objective:</b> Develop and implement TMDL for pathogens in Petaluma River</p> <p><b>Description:</b> Develop and implement TMDL for Petaluma River</p>	RWQCB-2	Sonoma County	Preliminary and final reports, Basin Plan amendment	6/30/04 to 4/30/06
Pre-Implementation 4.027-2	TMDL for nutrients, Napa River	<p><b>Objective:</b> Develop and implement TMDL</p> <p><b>Description:</b> Develop and implement TMDL for nutrients for Napa River watershed</p>	RWQCB-2	Napa County	Completed TMDL, quantifiable pollutant reduction goals	7/1/03 to 5/30/05
Pre-Implementation 4.087-3	TMDL for Pathogens, Sonoma Creek	<p><b>Objective:</b> Develop TMDL for mercury in San Francisco Bay</p> <p><b>Description:</b> Preliminary and final reports and prepare Basin Plan amendment</p>	RWQCB-2	Sonoma County	Reports and Basin Plan amendment	6/30/04 to 4/30/06
Implement 11.14-2	Rangeland BMPS West Walker River	<p><b>Objective:</b> To improve watershed conditions in a grazed area</p> <p><b>Description:</b> implementing rangeland BMPs such as installing fencing, changes in grazing patterns, directing access, revegetation</p>	RWQCB-6	Mono County	instream and riparian habitat improvement	8/1/99 to 12/31/03
Implement 19.002-3	Napa Vineyard Erosion Control Watershed Project	<p><b>Objective:</b> Using compost and mulch in hillside vineyard growing operations to mitigate erosion of sediments into local watershed.</p> <p><b>Description:</b> Promote systematic use of compost and mulch to vineyards in Napa Watershed and disseminate outreach information on application techniques.</p>	CIWMB	Napa	Increased utilization of compost and mulch in normal vineyard growing operations.	7/1/03 to 7/1/05

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 2.018-32	U.C. Rangeland Water Quality Workshops, Task 3	<p><b>Objective:</b> To improve rangeland water quality protection through education of rangeland owners and operators.</p> <p><b>Description:</b> Educate rangeland owners, ranch operators, and others about protecting rangeland water quality through improved grazing practices and monitoring.</p>	SWRCB	Statewide, Private Rangelands	Improved grazing practices and effective monitoring	1/1/01 to 6/30/08
Implement 2.018-42	U.C. Rangeland Water Quality Workshops, Task 4	<p><b>Objective:</b> To improve rangeland water quality protection through education of rangeland owners and operators.</p> <p><b>Description:</b> Educate rangeland owners, ranch operators, and others about protecting rangeland water quality through improved grazing practices and monitoring.</p>	SWRCB	Statewide, Private Rangelands		7/1/03 to 6/30/08
Implement 2.018-52	U.C. Rangeland Water Quality Workshops, Task 5	<p><b>Objective:</b> To improve rangeland water quality protection through education of rangeland owners and operators.</p> <p><b>Description:</b> Educate rangeland owners, ranch operators, and others about protecting rangeland water quality through improved grazing practices and monitoring.</p>	SWRCB	Statewide, Private Rangelands		7/1/03 to 6/30/08
Implement 3.12-2	Fish Friendly Farming	<p><b>Objective:</b> Promote vineyard construction, operation, and maintenance in a manner that is protective of water quality - to improve water quality and to restore and sustain habitat for federally listed salmonids.</p> <p><b>Description:</b> outreach/educational activities; farm conservation plan review; site inspections</p>	RWQCB-1	Sonoma and Mendocino Counties	Improved water quality	1/1/02 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 4.001-3	TMDL for siltation, Napa River	<b>Objective:</b> Develop and implement TMDL for siltation at Napa River Watershed	RWQCB-2	Napa County	Completed TMDL, project report, final report, Basin Plan amendment.	7/1/03 to	5/31/05
		<b>Description:</b> Develop and implement TMDL for siltation in Napa River Watershed					
Implement 4.002-3	TMDL for siltation, Sonoma Creek	<b>Objective:</b> Develop and implement TMDL for siltation in Sonoma Creek	RWQCB-2	Sonoma Creek Watershed	Preliminary and final project reports, Basin Plan amendment	7/1/03 to	6/30/05
		<b>Description:</b> Develop and implement TMDL for siltation in Sonoma Creek Watershed					
Implement 4.007-3	TMDL for Siltation, Pescadero/Butano	<b>Objective:</b> Develop and implement TMDL	RWQCB-2	San Mateo County	Preliminary and final project reports, Basin Plan amendment	7/1/04 to	6/30/07
		<b>Description:</b> Develop and implement TMDL for siltation in Pescadero/Butano Watersheds					
Implement 4.008-3	TMDL for Siltation, Lagunitas Creek	<b>Objective:</b> Develop and implement TMDL	RWQCB-2	Lagunitas Creek	Preliminary and final project reports, Basin Plan amendment	6/1/04 to	4/30/07
		<b>Description:</b> Develop and implement TMDL for Lagunitas Creek					
Implement 4.009-3	TMDL for Siltation, San Gregorio Creek	<b>Objective:</b> Develop and implement TMDL	RWQCB-2	San Gregorio Creek	Preliminary and final project reports, Basin Plan amendment	7/1/04 to	6/30/07
		<b>Description:</b> Develop and implement TMDL for San Gregorio Creek					

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 4.013-2	Manage contract on citizen monitoring	<p><b>Objective:</b> Oversight of contract to do citizen monitoring and to implement restoration project(s) to reduce sediment loading.</p> <p><b>Description:</b> Grant to do citizen monitoring in the watershed related to nonpoint source pollution, including sedimentation and urban runoff</p>	RWQCB-2	Marin County	Citizen monitoring teams created, sediment control project completed	7/1/03 to 12/31/05
Implement 4.019-2	TMDL for Pathogens, Napa River	<p><b>Objective:</b> Develop and implement TMDL for pathogens on the Napa River</p> <p><b>Description:</b> Develop and implement TMDLs for Napa River and Sonoma Creek</p>	RWQCB-2	Napa County	Completion of TMDL	6/1/04 to 4/30/06
Implement 4.021-2	TMDL for Pathogens, Tomales Bay	<p><b>Objective:</b> Develop and implement TMDL for pathogens on Tomales Bay</p> <p><b>Description:</b> Develop and implement TMDL for Tomales Bay</p>	RWQCB-2	Marin County	Final report, Basin Plan amendment	7/1/03 to 11/30/03
Implement 4.022-2	TMDL for nutrients, Petaluma River	<p><b>Objective:</b> Develop and implement TMDL</p> <p><b>Description:</b> Develop and implement TMDL for nutrients in Petaluma River watershed</p>	RWQCB-2	Sonoma County	Preliminary and final reports, Basin Plan amendment	7/1/04 to 6/30/07
Implement 4.023-2	TMDL for nutrients, Walker Creek	<p><b>Objective:</b> Develop and implement TMDL</p> <p><b>Description:</b> Develop and implement TMDL for nutrients in Walker Creek watershed</p>	RWQCB-2	Marin County	Completed TMDL reports, Basin Plan amendment	7/1/04 to 6/30/07

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 4.024-3	TMDL for nutrients, Tomales Bay	<b>Objective:</b> Develop and implement TMDL  <b>Description:</b> Develop and implement nutrient TMDL for Tomales Bay	RWQCB-2	Marin County	Preliminary and final TMDL reports, Basin Plan amendment	7/1/04 to 6/30/07
Implement 4.026-2	TMDL for nutrients, Suisun Marsh	<b>Objective:</b> Develop and implement TMDL  <b>Description:</b> Develop and implement TMDL for Suisun Marsh	RWQCB-2	Solano County	TMDL preliminary and final reports, Basin Plan amendment	6/1/06 to 6/30/08
Implement 4.028-2	TMDL for nutrients, Sonoma Creek	<b>Objective:</b> Develop and implement TMDL  <b>Description:</b> Develop and implement TMDL for nutrients for Sonoma Creek	RWQCB-2	Sonoma County	Completed TMDL, quantifiable pollutant reduction goals	7/1/03 to 6/30/05
Implement 4.031-3	Manage contract on grazing practices	<b>Objective:</b> Oversight of contract to address grazing practices and pollution prevention  <b>Description:</b> Oversee contract and product development	RWQCB-2	Alameda County	Completion of erosion control projects, field tours.	7/1/03 to 6/30/04
Implement 4.032	Manage contract for benthic macroinvert monitoring	<b>Objective:</b> Oversee contract to develop and Implement citizen monitoring program for benthic macroinvertebrates  <b>Description:</b> Citizen monitoring	RWQCB-2	Napa County	Completion of monitoring	7/1/03 to 6/30/05
Implement 4.033-2	Manage contract for sediment reduction in Sonoma Creek	<b>Objective:</b> Oversee contract to complete sediment reduction projects along Sonoma Creek  <b>Description:</b> Project will implement three sediment reduction projects and develop sediment budget for TMDL on Sonoma Creek	RWQCB-2	Sonoma County	Completion of projects	7/1/03 to 3/30/05

**Table IIIB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 4.078-3	Manage contract for vineyard certification program	<p><b>Objective:</b> Oversight of contract that will develop a vineyard certification program in Napa County</p> <p><b>Description:</b> The Napa RCD will implement a vineyard operator certification program similar to the successful "Fish Friendly Farming" program on the North Coast. Vineyard operators will be given planning courses and develop individual facility plans that will be implemented through specific conservation practices.</p>	RWQCB-2	Napa County	Reduction in sediment to creeks, reduction in pesticide use	7/1/03 to 12/31/06
Implement 4.084-3	Manage contract on Lagunitas Creek watershed improvement	<p><b>Objective:</b> Oversee contract on development of limiting factors for salmonid fishery on prime coho salmon stream and implementation of erosion control projects</p> <p><b>Description:</b> This project will implement erosion and sediment control projects on San Geronimo and Lagunitas Creeks and conduct a limiting factors assessment to support upcoming TMDLs</p>	RWQCB-2	Marin County	Projects implemented, limiting factors identified	7/1/03 to 12/31/06

**Management Measure: 1H Used Oil - Hazardous Waste Management**

Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Implement 19.008	Agricultural Used Oil Collection	<p><b>Objective:</b> To reclaim waste oil generated by the agricultural sector and reduce non point source waste oil pollution by establishing agricultural used oil collection facilities within CA counties.</p> <p><b>Description:</b> Provide local governments with grants to: 1) collect stockpiled waste oil from small acreage growers/ranchers; 2) establish agricultural used oil collection facilities or mobile collection programs in an additional 5 counties; 3) Educate growers about used oil collection programs.</p>	CIWMB	Statewide	Five additional ag used oil collection programs established	1/1/03 to 12/31/07



**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: All-A All Agriculture Measures</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 15.015	Update Waste Discharge Requirements for commercial nurseries	<p><b>Objective:</b> Update Waste Discharge Requirements (WDRs) for commercial nurseries</p> <p><b>Description:</b> Update Waste Discharge Requirements for commercial nurseries, as part of Newport Bay TMDL.</p>	RWQCB-8	Newport Bay Watershed	Updated WDRs	7/1/03 to 6/30/08
Pre-Implementation 33.004-2	NPS Pollution in Pest Eradication Programs	<p><b>Objective:</b> Minimize/avoid NPS pollution in pest eradication programs. Consult with RWQCBs and SWRCB when developing programs.</p> <p><b>Description:</b> Consultation.</p>	DFA	Statewide	Avoidance of pesticide contamination.	7/1/03 to 6/30/08
Pre-Implementation 5.016	Identify target/high priority agricultural projects	<p><b>Objective:</b> Identify target projects based on watershed management and TMDL implementation plans. Projects to provide cost-share for BMP Implementation to address sediment, nutrient, pesticide run-off, and other ag related issues.</p> <p><b>Description:</b> Identify and target priority ag projects to support implementation of those projects. Provide technical assistance and participate in development of watershed agriculture working groups to facilitate implementation of regional Ag Water Quality Management Plan.</p>	RWQCB-3	Regionwide RB3	Priority projects implemented	7/1/03 to 6/30/08
Pre-Implementation 5.018	Assist in identifying funding sources for priority projects	<p><b>Objective:</b> To provide technical assistance and to participate in development of watershed agriculture working groups to facilitate implementation of regional Ag Water Quality Management Plan.</p> <p><b>Description:</b> Identify funding sources and support funding for priority projects.</p>	RWQCB-3	Regionwide RB3	Fund priority projects	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 5.101	Develop/update Ag. water quality mgnt. plan	<p><b>Objective:</b> Develop/update Ag regulatory program</p> <p><b>Description:</b> Creation of the Plan includes; Convene an Ag advisory panel, develop conditions for compliance, develop a monitoring and reporting program. Develop a tracking, outreach and enforcement policy to go with the Ag Water Quality mgnt. Plan</p>	RWQCB-3	Regionwide RB3	Creation of the Plan	7/1/03 to 6/30/08
Pre-Implementation 5.102	Assist working watershed ag. group formation-Pajaro	<p><b>Objective:</b> Interagency and stakeholder coordination to involve land use managers in UCCE farm water quality management plans, the development of individual ranch management plans, and BMP tracking.</p> <p><b>Description:</b> Creation of the Plan includes; Convene an Ag advisory panel, develop conditions for compliance, develop a monitoring and reporting program. Develop a tracking, outreach and enforcement policy to go with the Ag Water Quality mgnt. Plan</p>	RWQCB-3	Pajaro River Watershed	Widespread participation in courses and development of management plans.	7/1/03 to 6/30/08
Pre-Implementation 5.103	Assist working watershed ag. group formation-San Benito	<p><b>Objective:</b> Interagency and stakeholder coordination to involve land use managers in UCCE farm water quality management plans</p> <p><b>Description:</b> The development of individual ranch management plans, and BMP tracking.</p>	RWQCB-3	San Benito River Watershed	Widespread participation in courses and development of management plans.	7/1/03 to 6/30/08
Pre-Implementation 5.104	Assist working watershed ag. group formation-Other NWMA	<p><b>Objective:</b> To provide technical assistance and to participate in development of watershed agriculture working groups to facilitate implementation of regional Ag Water Quality Management Plan.</p> <p><b>Description:</b> Interagency and stakeholder coordination to involve land use managers in UCCE farm water quality management plans, the development of individual ranch management plans, and BMP tracking.</p>	RWQCB-3	Other Northern Watersheds	Widespread participation in courses and development of management plans.	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 5.105	Assist working watershed ag. group formation-Salinas	<p><b>Objective:</b> Interagency and stakeholder coordination to involve land use managers in UCCE farm water quality management plans, the development of individual ranch management plans, and MP tracking.</p> <p><b>Description:</b></p>	RWQCB-3	Salinas River Watershed	Widespread participation in courses and development of management plans.	7/1/03 to 6/30/08
Pre-Implementation 5.106	Agriculture watershed group formation-Elkhorn Sough	<p><b>Objective:</b> Interagency and stakeholder coordination to involve land use managers in UCCE farm water quality management plans.</p> <p><b>Description:</b> The development of individual ranch management plans, and BMP tracking.</p>	RWQCB-3	Elkhorn Slough Watershed	Widespread participation in courses and development of management plans.	7/1/03 to 6/30/08
Pre-Implementation 5.107	Assist working watershed ag. group formation-San Luis Obispo	<p><b>Objective:</b> Interagency and stakeholder coordination to involve land use managers in UCCE farm water quality management plans, the development of individual ranch management plans, and BMP tracking.</p> <p><b>Description:</b></p>	RWQCB-3	San Luis Obispo Creek Watershed	Widespread participation in courses and development of management plans.	7/1/03 to 6/30/08
Pre-Implementation 5.108	Assist working watershed ag. group formation-Carmel	<p><b>Objective:</b> Interagency and stakeholder coordination to involve land use managers in UCCE farm water quality management plans</p> <p><b>Description:</b> The development of individual ranch management plans, and BMP tracking.</p>	RWQCB-3	Carmel River Watershed	Widespread participation in courses and development of management plans.	7/1/03 to 6/30/08
Pre-Implementation 5.109	Assist working watershed ag. group formation-Arroyo Grande	<p><b>Objective:</b> Interagency and stakeholder coordination to involve land use managers in UCCE farm water quality management plans, the development of individual ranch management plans, and BMP tracking.</p> <p><b>Description:</b> Provide technical assistance and participate in the development of watershed agriculture working groups to facilitate implementation of regional Ag Water Quality Management Plan.</p>	RWQCB-3	Arroyo Grande Creek Watershed	Widespread participation in courses and development of management plans.	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 5.110	Assist working watershed ag. group formation-Other CWMA	<p><b>Objective:</b> Interagency and stakeholder coordination to involve land use managers in UCCE farm water quality management plans, the development of individual ranch management plans, and BMP tracking.</p> <p><b>Description:</b> Provide technical assistance and participate in the development of watershed agriculture working groups to facilitate implementation of regional Ag Water Quality Management Plan.</p>	RWQCB-3	Other Coastal Watersheds	Widespread participation in courses and development of management plans.	7/1/03 to 6/30/08
Pre-Implementation 5.111	Assist working watershed ag. group formation-Santa Maria	<p><b>Objective:</b> Interagency and stakeholder coordination to involve land use managers in UCCE farm water quality management plans, the development of individual ranch management plans, and BMP tracking.</p> <p><b>Description:</b> Provide technical assistance and participate in the development of watershed agriculture working groups to facilitate implementation of regional Ag Water Quality Management Plan.</p>	RWQCB-3	Santa Maria River Watershed	Widespread participation in courses and development of management plans.	7/1/03 to 6/30/08
Pre-Implementation 5.112	Assist working watershed ag. group formation-Santa Ynez	<p><b>Objective:</b> Interagency and stakeholder coordination to involve land use managers in UCCE farm water quality management plans, the development of individual ranch management plans, and BMP tracking.</p> <p><b>Description:</b> Provide technical assistance and participate in the development of watershed agriculture working groups to facilitate implementation of regional Ag Water Quality Management Plan.</p>	RWQCB-3	Santa Ynez River Watershed	Widespread participation in courses and development of management plans.	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 5.113	Assist working watershed ag. group formation-San Antonio	<p><b>Objective:</b> Interagency and stakeholder coordination to involve land use managers in UCCE farm water quality management plans, the development of individual ranch management plans, and BMP tracking.</p> <p><b>Description:</b> Provide technical assistance and participate in the development of watershed agriculture working groups to facilitate implementation of regional Ag Water Quality Management Plan.</p>	RWQCB-3	San Antonio Creek Watershed	Widespread participation in courses and development of management plans.	7/1/03 to 6/30/08
Pre-Implementation 5.114	Assist working watershed ag. group formation-Oso Flaco	<p><b>Objective:</b> Interagency and stakeholder coordination to involve land use managers in UCCE farm water quality management plans, the development of individual ranch management plans, and BMP tracking.</p> <p><b>Description:</b> Provide technical assistance and participate in the development of watershed agriculture working groups to facilitate implementation of regional Ag Water Quality Management Plan.</p>	RWQCB-3	Oso Flaco Watershed	Widespread participation in courses and development of management plans.	7/1/03 to 6/30/08
Pre-Implementation 5.115	Assist working watershed ag. group formation-South Coast	<p><b>Objective:</b> Interagency and stakeholder coordination to involve land use managers in UCCE farm water quality management plans, the development of individual ranch management plans, and BMP tracking.</p> <p><b>Description:</b> Provide technical assistance and participate in the development of watershed agriculture working groups to facilitate implementation of regional Ag Water Quality Management Plan.</p>	RWQCB-3	South Coast Watershed	Widespread participation in courses and development of management plans.	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 5.116	Assist working watershed ag. group formation-Other SWMA	<p><b>Objective:</b> Interagency and stakeholder coordination to involve land use managers in UCCE farm water quality management plans, the development of individual ranch management plans, and BMP tracking.</p> <p><b>Description:</b> Provide technical assistance and participate in the development of watershed agriculture working groups to facilitate implementation of regional Ag Water Quality Management Plan.</p>	RWQCB-3	Other Southern Watersheds	Widespread participation in courses and development of management plans.	7/1/03 to 6/30/08
Pre-Implementation 5.117	Assist farm/ranch water quality plan development	<p><b>Objective:</b> Development of effective farm/ranch water quality plans</p> <p><b>Description:</b> Provide technical assistance in water quality plan development</p>	RWQCB-3	Agricultural areas regionwide	Site specific water quality plans	7/1/03 to 6/30/08
Pre-Implementation 8.011	Lower Kings River Electrical Conductivity TMDL	<p><b>Objective:</b> Begin EC TMDL development in 2004</p> <p><b>Description:</b> Begin EC TMDL development in 2004. Basin Plan amendment will be during the next 5 year plan</p>	RWQCB-5F	Lower Kings River	Form TMDL stakeholder group and begin monitoring	7/1/03 to 6/30/08
Pre-Implementation 8.012	Lower Kings River Molybdenum TMDL	<p><b>Objective:</b> Begin molybdenum TMDL development in 2004</p> <p><b>Description:</b> Begin molybdenum TMDL development in 2004. Basin Plan amendment will be during the next 5 year plan.</p>	RWQCB-5F	Lower Kings River	Form TMDL stakeholder group and begin monitoring	7/1/03 to 6/30/08
Pre-Implementation 8.013	Lower Kings River Toxaphene TMDL	<p><b>Objective:</b> Begin toxaphene TMDL development in 2004</p> <p><b>Description:</b> Begin toxaphene TMDL development in 2004. Basin Plan amendment will be during next 5 year plan</p>	RWQCB-5F	Lower Kings River	Formation of TMDL stakeholder group and monitoring	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 10.088	Glenn County Surface Water Stewardship	<p><b>Objective:</b> Reduce pesticide impacts to water quality in Glenn County.</p> <p><b>Description:</b> Outreach, research, and pesticide management education programs for the tributaries of the Sacramento River in Glenn County, California. The program will utilize field days, farm tours, newsletters, and the media to inform stakeholders of pesticide management programs.</p>	RWQCB-5S	Glenn County	Completion of outreach and demonstration projects.	7/1/04 to 6/30/07
Implement 16.102	Agricultural Discharge Oversight	<p><b>Objective:</b> To ensure NPS pollution prevention in watersheds where agriculture land use activities take place.</p> <p><b>Description:</b> Identify and monitor potential sources of pollution from agriculture land use activities. Enforce Region 9 waitver policies.</p>	RWQCB-9	Regionwide - Region 9	protection and restoration of water quality in areas where agriculture land use activities take place.	7/1/03 to 6/30/08
Implement 24.009	Regional Deslination Project	<p><b>Objective:</b> To demonstrate within a 3-year period the sustained, full-scale operation of an on-farm, tile-water recycling process that completely eliminates off-farm drainage disposal.</p> <p><b>Description:</b> Year 4 Tasks(Completion of Phase 1): 1.1 Perform Site Testing, 1.2 Investigate Brine Options, 1.3 Finalize System Design, 1.4 Prepare Interim Report. The Project will begin in Year 4 and will be completed by Year 7.</p>	CBDA	Panoche Drainage District	Completed demonstration project.	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 24.010	Control Runoff Into Conveyances	<p><b>Objective:</b> Impelement Agriculture Drainage BMPs</p> <p><b>Description:</b> Implement appropriate physical modifications and watershed programs to prevent contamination from stormwater runoff and agricultural drainage. Initiate comprehensive evaluation of necessary physical modifications (e.g., modifications to berms, bypasses, and storm drains to divert stormwater away from, and prevent its discharge into, the Aqueduct and other similar conveyance channels) by the end of 2001. Develop and implement watershed programs adjacent to appropriate conveyance channels by the beginning of 2004. Identify and begin implementation of necessary physical improvements by the end of 2005.</p>	CBDA	Bay Delta	BMP Implementation	7/1/03 to 6/30/08
Implement 3.001	Vineyard Outreach	<p><b>Objective:</b> Education and technology transfer for water quality issues and vineyard use of appropriate management measures.</p> <p><b>Description:</b> To visit and discuss these issues with grape growers, in the field or at invited meetings. Distribute written information.</p>	RWQCB-1	Mostly Sonoma and Mendocino Counties	Less public complaints and need for enforcement.	7/1/98 to 6/30/08
Implement 3.002	Vineyard Inspections	<p><b>Objective:</b> To determine compliance with Basin Plan waste discharge prohibitions.</p> <p><b>Description:</b> Conduct pre-construction inspections and complaint inspections.</p>	RWQCB-1	Mostly Sonoma and Mendocino Counties	Less Basin Plan violations.	7/1/98 to 6/30/08
Implement 3.003	Vineyard Enforcement	<p><b>Objective:</b> To gain compliance with Federal and State water quality regulations.</p> <p><b>Description:</b> Formal and staff Basin Plan enforcement actions.</p>	RWQCB-1	Mostly Sonoma and Mendocino Counties	Compliance.	7/1/98 to 6/30/08



**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 3.01	Vineyard task force	<p><b>Objective:</b> Development of geographic/geologic region-specific vineyard guidelines that will ensure compliance with all applicable water quality standards</p> <p><b>Description:</b> Participate in statewide meetings. Several regions (including Region 1) already have or work with area specific guidelines. Product from this group may be guidelines for areas not already specifically addressed.</p>	RWQCB-1	Statewide	Vineyard guidelines; Basin Plan compliance	1/1/03 to 6/30/08
Implement 3.011	Dairies	<p><b>Objective:</b> To bring dairies into compliance with Federal and State water quality regulations.</p> <p><b>Description:</b> All staff activities for dairy outreach, complaint inspections, and enforcement.</p>	RWQCB-1	Mostly Sonoma and Humboldt Counties	Compliance with Basin Plan waste discharge prohibitions and water quality objecties.	7/1/98 to 6/30/08
Implement 5.020	Assist priority projects implementation	<p><b>Objective:</b> To provide technical assistance and to participate in development of watershed agriculture working groups to facilitate implementation of regional Ag Water Quality Management Plan.</p> <p><b>Description:</b> Provide technical assistance for priority project implementation</p>	RWQCB-3	Regionwide RB3	Priority project implementation	7/1/03 to 6/30/08
Implement 5.118	Assist farm/ranch water quality plan implementation	<p><b>Objective:</b> Implementation of effective farm/ranch water quality plans</p> <p><b>Description:</b> Assist with implementation of BMPs consistent with water quality plans</p>	RWQCB-3	Agricultural areas regionwide	Increased BMP implementation	7/1/03 to 6/30/08
Track/Monitor 5.120	Assist grower self-monitoring program development	<p><b>Objective:</b> Assist in development of watershed-wide self monitoring programs</p> <p><b>Description:</b> Participate in TAC meetings and provide technical assistance in monitoring plan development</p>	RWQCB-3	Regionwide RB3	Development of effective ag. self monitoring programs	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Track/Monitor 6.016	Use of Improved Tech. and BMP's to Control of Nursery Runoff	<b>Objective:</b> Agriculture Control	RWQCB-4	Regionwide RB4	Will be finalized at contract approval time	7/1/03 to	6/30/06
		<p><b>Description:</b>            Address agricultural runoff in Region with a focus on nurseries through inspections of facilities, outreach, voluntary implementation of BMPs, and monitoring to assess success. Concentrate on nurseries in Ventura County where pesticide use is impacting coastal waters.</p>					

**SECTION III  
FORESTRY CATEGORY  
FIVE-YEAR IMPLEMENTATION PLAN  
July 2003 through June 2008**

**A. FORESTRY MMs AND ISSUES OF CONCERN**

The SWRCB and the CCC has established eleven MMs to address the various phases of forest operations that can cause pollution of State waters. The State’s Forest Practice Rules (FPRs), which are promulgated by the State Board of Forestry and Fire Protection (BOF) and administered by the California Department of Forestry and Fire Protection (CDF), closely reflect these silvicultural MMs. The eleven Forestry MMs are listed and defined in Table IIIA, below, and further defined in Appendix II of this document.

**Table IIIA  
Forestry Category MMs**

<b>MM Code</b>	<b>Forestry MM Title</b>
2A	Pre-Harvest Planning
2B	Streamside Management Areas (SMAs)
2C	Road construction/Reconstruction
2D	Road Management
2E	Timber Harvesting
2F	Site Preparation and Forest Regeneration
2G	Fire Management
2H	Re-vegetation of Disturbed Areas
2I	Forest Chemical Management
2J	Wetlands Forest Management
2K	Education/Outreach

Timber harvesting and associated activities can result in the discharge of earthen materials, organic materials, chemical pollutants, and petroleum products. Sediment induced water quality impacts occur when earthen materials transported by surface erosion or mass wasting enter a stream. Several studies suggest that road construction and stream crossings account for the majority of sediment discharged from logging operations. Also, operations conducted during the winter wet season have more potential to discharge sediment that can adversely impact water quality, than do operations during the dry summer season. Other factors that can affect the quantity of sediment and organic debris discharged include selection appropriate silvicultural and logging methods, proper plan layout and mitigation, and operator skill. Chemical pollutants can be discharged by way of runoff and by drift. Potential sources of chemical and nutrient runoff include roads that have been treated with oils or other dust suppressing materials, herbicide applications, and ash nutrients resulting from slash burning. Excessive logging can also increase summer water temperatures through removal of tree canopy in riparian areas and can increase peak stream flows by reducing interception.

The activities that are being pursued by State Agencies specifically address all of the identified MMs, with the exception of 2J, Wetlands Forest Management. However, many of the activities consist of

an overall planning and implementation effort intended to address ‘All’ of the Forestry MMs, including Wetlands Forest Management.

## **B. RELATION TO OTHER STATE PROGRAMS:**

### **1. Waste Discharge Requirements and Conditional Waiver Policies**

The CWC Section 13269 authorizes RWQCBs to waive the necessity of obtaining waste discharge requirements and to submit reports of waste discharge as to a specific type of discharge if the waiver is not against the public interest and the conditions of the waiver are met. RWQCBs have recently adopted waivers for waste discharge requirements related to timber harvesting activities, provided that the activities comply with the general conditions listed in each waiver. These conditions include such factors as compliance with the applicable requirements set forth in each Region’s water quality control plans.

### **2. Impaired 303(d) Lists and TMDLs**

Under Section 303(d) of the Clean Water Act, California is required to compile a list of impaired waters that fail to meet applicable water quality standards or that cannot support their designed beneficial uses. This list, called a ‘303(d)’ list is submitted to Congress every two years, and California is required to develop a Total Maximum Daily Load (TMDL) for each pollutant causing impairment to the waterbodies that are listed. The current 303(d) list in California identifies 56 waterbodies that are impaired due to NPS pollution due, at least in part, to timber operations. Over the next five-year period, California is planning to expend significant resources to develop and implement the TMDLs for these identified water bodies. This process will include TMDL implementation plans which will utilize the MMs identified in California’s NPS Program Plan.

### **3. Department of Pesticide Regulation**

The California Department of Pesticide Regulation (CDPR) regulates the sale and use of pesticides and, through the county agricultural commissioners (CACs), enforces laws pertaining to pesticide use. CACs inspect pesticide applications to forests and ensures that applications do not violate pesticide laws and regulations that protect water quality. California Department of Forestry (CDF) and CDPR have developed a process for cooperating in the review of comments received concerning draft Timber Harvest Plans (THPs). If CDF receives comments on pesticide use, CDF consults with CDPR and alerts them about the issues. CDPR and CDF also cooperate to train staff on laws, regulations, and best management practices (BMPs) pertaining to the use of pesticides in silviculture.

### **4. Forest Practice Regulations and Management Agency Agreement**

The California Board of Forestry, now known as the Board of Forestry and Fire Protection (BOF), was created in 1885. The Z’Berg-Nejedly Forest Practices Act of 1973 (Forest Practices Act) required the BOF to adopt Forest Practice Rules (FPRs) to regulate timber operations on private and state lands to, among other things, protect water quality. The Forest Practices Act provides a conditional exemption from waste discharge requirements for timber operations (article 1. section 4514.3.) The FPRs are intended to establish responsible forest resource management practices which serve the demand for timber and other forest products, while giving consideration to the public’s need for watershed protection, fisheries, and wildlife and recreational opportunities.

Under the CWA, state water quality planning agencies were mandated to develop water quality management plans for controlling NPS pollution, to designate other agencies as “management agencies for carrying out water quality management plan provisions,, and to execute management agency agreements (MAAs) with such agencies, setting forth their commitment to water quality management plan implementation. In 1988, the SWRCB certified a water quality management plan for timber

operations on nonfederal lands, designated BOF and CDF as management agencies, and entered into a MAA with BOF and CDF.

During the year 2003, the SWRCB, CDF and RWQCB's developed and signed a supplementary memorandum of understanding (MOU), which contains a series of provisions such as dispute resolution provisions, that will help resolve differences between these agencies. Another effort has begun which may result in amending the 1988 MAA.

## **C. OBJECTIVES AND ACTIVITY SUMMARY**

### **1. Forestry Category Objectives**

Although the supplementary MOU and possible MAA amendments will shape the process through which implementation of forestry MMs are regulated, staff from the CDF, SWRCB, RWQCBs and other State agencies (via the IACC) recently undertook a concerted, collaborative process for the development of Category Objectives for the NPS Implementation Plan 2003-2008. Over a period of approximately one year, the NPS IACC met frequently to consider the missions of each agency relative to sources of pollution in private and state forest lands; to formulate a means for collaboration, and to set overall objectives for the collaborative process. The result of this effort, which will provide focus and direction to efforts relative to Forestry NPS pollution prevention, are the Forestry Category Objectives, which are listed below. These objectives will serve to guide and measure the progress that will be made over the next five years.

- a) Reduce interagency conflict regarding recommended mitigations through development of a Monitoring Agreement MOU.
- b) Develop or improve upon an effective, practical and accepted approach for directly evaluating Cumulative Watershed Effects (CWE) for Forest Management activities.
- c) Develop and improve interagency understanding and collaboration of their respective roles and responsibilities for water quality, related to timber operations.
- d) Develop and implement watershed-based plans, including TMDL's in order to identify and address land-use impacts including those from forestry practices.
- e) Encourage the implementation of NPS Management Measures on all forest lands in California, including private and federal lands.
- f) Provide educational opportunities for THP reviewers, foresters, pesticide regulators, and other forest management parties that will address water quality and environmental protection.
- g) Continue to develop and conduct effectiveness evaluations of forestry management practices with respect to protection of water quality.

### **2. Activity Summary for Forestry Category**

The activities that are being pursued by State Agencies as listed in Table IIIB specifically address all of the identified MMs, with the exception of 2J, Wetlands Forest Management. However, many State activities consist of an overall planning and implementation effort which is intended to address 'All' of the Forestry MMs, including Wetlands Forest Management. Additionally, the eight Forestry Category Objectives, as listed above, are fully supported by multiple activities in this Category.

There is one additional activity listed in another section of this NPS 5-Year Implementation Plan, Section I, 'All or Multiple Categories'. That is the State Lands Assessment activity, which is identified and described in the 'All Category'. This activity will be supportive of Forestry Objective 3e, 'Identify and assess State-owned lands that are impacted or influenced by forestry practices', as well as objectives identified in all other NPS Categories.

**Table IIIB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

**Forestry**

**Management Measure: 2A Preharvest Planning**

Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Pre-Implementation 25.001-2	Timber Harvest Planning Process (THP)	<p><b>Objective:</b> Mitigation of potential projects impacts on water quality through pre-harvest planning.</p> <p><b>Description:</b> THPs submitted to CDF are reviewed by CDF and cooperating agencies. Any needed modifications and mitigations to protect water quality are added to each THP before the THP is approved and operations can begin.</p>	CDF	Statewide	Each THP when implemented properly protects water quality.	7/1/03 to 6/30/08
Pre-Implementation 27.001-1	Timber Harvest Plan Review	<p><b>Objective:</b> Reduce the amount of sediment being deposited into streams as a result of Forest Management practices. Reduce landsliding and erosion through THP planning.</p> <p><b>Description:</b> Review proposed THPs and assist in the development of FPRs related to proposed road construction and reconstruction, landsliding, slope stability, erosion and sedimentation.</p>	DOC	Statewide	Number of office and field reviews conducted. Number of recommendations accepted by CDF.	7/1/03 to 6/30/08
Pre-Implementation 27.008-1	Landslide and Geomorphic Mapping	<p><b>Objective:</b> Identify potential sources of landsliding and sedimentation through programs for landslide and geomorphic mapping.</p> <p><b>Description:</b> Prepare landslide maps and geomorphic stream channel maps at a scale of 1:24,000 based on geology and prioritized watersheds on the north coast.</p>	DOC	North Coast	Completion of maps within expected time frames.	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 11.62-1	Timber Harvest Plan Review	<p><b>Objective:</b> To protect water quality from impacts of timber activities.</p> <p><b>Description:</b> To conduct pre- and post-harvest inspections and plan review.</p>	RWQCB-6	Regionwide RB6	Completed plan reviews	7/1/03 to 6/30/08
Implement 4.034-1	Timber Harvest Plan review	<p><b>Objective:</b> Review of timber harvest plans</p> <p><b>Description:</b> Staff review of timber harvest plans and provide comments</p>	RWQCB-2	Napa, Sonoma, and San Mateo Counties	Implementation of erosion control measures and habitat protections such as riparian buffer maintenance	7/1/03 to 6/30/08
Implement 9.010-1	Timber Harvest Plan Review	<p><b>Objective:</b> Assure that timber harvest plans are protective of water quality.</p> <p><b>Description:</b> Review and recommend changes as needed to timber harvest plans to reduce risk of NPS pollution from timber harvest activities.</p>	RWQCB-5R	Mountainous areas of R5	MPs implemented.	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 2B Streamside Management Areas</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 27.001-2	Timber Harvest Plan Review	<p><b>Objective:</b> Reduce the amount of sediment being deposited into streams as a result of Forest Management practices. Reduce landsliding and erosion through THP planning.</p> <p><b>Description:</b> Review proposed THPs and assist in the development of FPRs related to proposed road construction and reconstruction, landsliding, slope stability, erosion and sedimentation.</p>	DOC	Statewide	Number of office and field reviews conducted. Number of recommendations accepted by CDF.	7/1/03 to 6/30/08
Pre-Implementation 4.036-1	Timber Company Sediment Input Evaluation	<p><b>Objective:</b> Work with timber companies to evaluate/reduce their sediment input.</p> <p><b>Description:</b> Coordinate with timber harvest companies</p>	RWQCB-2	San Mateo County	Evaluation and BMP development and implementation	1/1/04 to 12/31/06
Implement 27.010	Streamside Management Practices	<p><b>Objective:</b> Develop permanent and effective FPRs that will protect salmonid and non-salmonid streams.</p> <p><b>Description:</b> Participate in on-going development of practices and rules for streamside management.</p>	DOC	Statewide	Development of specific rules packages.	7/1/03 to 6/30/08
Implement 9.012-3	Deer Creek watershed erosion & sediment control project	<p><b>Objective:</b> Reduce potential erosion associated with selected roads and stream crossings in upper Deer Creek</p> <p><b>Description:</b> Implement road and crossing improvements</p>	RWQCB-5R	Eastern Tehama County	Implementation of improvements	7/1/03 to 6/30/08



**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Track/Monitor 25.003-3	Monitoring of FPR Implementation and Effectiveness	<p><b>Objective:</b>          Monitor the implementation and effectiveness of the Forest Practice Rules in protecting water quality and aquatic habitat.</p> <p><b>Description:</b>          Hillslope Monitoring Program (HMP) monitors 50 randomly selected THPs/NTMPs each year, using an outside contractor. Modified Completion Report Monitoring monitors 12.5% THPs, randomly selected from THP undergoing Completion Inspections, using CDF Forest Practice inspectors.</p>	BOF	Statewide	Proper implementation and effectiveness of FPRs designed to protect water quality.	7/1/03 to	6/30/08
---------------------------	--	---	-----	-----------	--	-----------	---------

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 2C Road Construction/Reconstruction</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 27.001-3	Timber Harvest Plan Review	<p><b>Objective:</b> Reduce the amount of sediment being deposited into streams as a result of Forest Management practices. Reduce landsliding and erosion through THP planning.</p> <p><b>Description:</b> Review proposed THPs and assist in the development of FPRs related to proposed road construction and reconstruction, landsliding, slope stability, erosion and sedimentation.</p>	DOC	Statewide	Number of office and field reviews conducted. Number of recommendations accepted by CDF.	7/1/03 to 6/30/08
Pre-Implementation 27.006-1	Road Rules Committee	<p><b>Objective:</b> Develop road construction standards that prevent erosion/sedimentation with requirements to put them in place prior to timber harvesting.</p> <p><b>Description:</b> Participate in development of new Forest Practice Rules related to roads.</p>	DOC	Statewide	Development of proposed rule changes.	1/1/03 to 12/31/03
Pre-Implementation 4.036-2	Timber Company Sediment Input Evaluation	<p><b>Objective:</b> Work with timber companies to evaluate/reduce their sediment input.</p> <p><b>Description:</b> Coordinate with timber harvest companies</p>	RWQCB-2	San Mateo County	Evaluation and BMP development and implementation	1/1/04 to 12/31/06
Implement 9.012-2	Deer Creek watershed erosion & sediment control project	<p><b>Objective:</b> Reduce potential erosion associated with selected roads and stream crossings in upper Deer Creek</p> <p><b>Description:</b> Implement road and crossing improvements</p>	RWQCB-5R	Eastern Tehama County	Implementation of improvements	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 2D Road Management</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 11.24-2	Blackwood Creek TMDL	<b>Objective:</b> Watershed restoration through the TMDL process <b>Description:</b> To complete a TMDL and get Basin Plan and EPA approval.	RWQCB-6	Nevada County	Completed TMDL	7/1/03 to 1/1/08
Pre-Implementation 25.001-3	Timber Harvest Planning Process (THP)	<b>Objective:</b> Mitigation of potential projects impacts on water quality through pre-harvest planning. <b>Description:</b> THPs submitted to CDF are reviewed by CDF and cooperating agencies. Any needed modifications and mitigations to protect water quality are added to each THP before the THP is approved and operations can begin.	CDF	Statewide	Each THP when implemented properly protects water quality.	7/1/03 to 6/30/08
Pre-Implementation 27.006-2	Road Rules Committee	<b>Objective:</b> Develop road construction standards that prevent erosion/sedimentation with requirements to put them in place prior to timber harvesting. <b>Description:</b> Participate in development of new Forest Practice Rules related to roads.	DOC	Statewide	Development of proposed rule changes.	1/1/03 to 12/31/03
Implement 25.004-2	Jackson Demonstration State Forest Plan Implementation	<b>Objective:</b> Manage the Jackson Demonstration State Forest so as to protect and enhance water quality and aquatic habitat, while achieving the other objectives of the State Forest enumerated in the plan. <b>Description:</b> Jackson Demonstration State Forest, which includes a Road Management Plan, will be implemented on the ground.	CDF	Jackson Demonstration State Forest	Sediment source reduction. Streamside canopy meets or exceeds standards.	1/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 9.012-1	Deer Creek watershed erosion & sediment control project	<p><b>Objective:</b> Reduce potential erosion associated with selected roads and stream crossings in upper Deer Creek</p> <p><b>Description:</b> Implement road and crossing improvements</p>	RWQCB-5R	Eastern Tehama County	Implementation of improvements	7/1/03 to 6/30/08
Track/Monitor 25.003-2	Monitoring of FPR Implementation and Effectiveness	<p><b>Objective:</b> Monitor the implementation and effectiveness of the Forest Practice Rules in protecting water quality and aquatic habitat.</p> <p><b>Description:</b> Hillslope Monitoring Program (HMP) monitors 50 randomly selected THPs/NTMPs each year, using an outside contractor. Modified Completion Report Monitoring monitors 12.5% THPs, randomly selected from THP under going Completion Inspections, using CDF Forest Practice inspectors.</p>	BOF	Statewide	Proper implementation and effectiveness of FPRs designed to protect water quality.	7/1/03 to 6/30/08
Track/Monitor 27.016	Off-Highway Vehicle (OHV) Soils Inspection	<p><b>Objective:</b> Assist Department of Parks and Recreation (DPR) by conducting soils inspections of federal Off-Highway Vehicle (OHV) grant sites to document compliance/deviation with wildlife habitat protection mandates and monitoring plans.</p> <p><b>Description:</b> Conduct field reviews and prepare reports on monitoring plans associated with trails, erosion control techniques, resource and soils monitoring. Provide recommendataions for improvements.</p>	DOC	Statewide	Number of federal OHV sites visited per year for which monitoring plans are in compliance.	6/1/03 to 6/30/05

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 2E Timber Harvesting</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 4.036-3	Timber Company Sediment Input Evaluation	<b>Objective:</b> Work with timber companies to evaluate/reduce their sediment input.  <b>Description:</b> Coordinate with timber harvest companies	RWQCB-2	San Mateo County	Evaluation and BMP development and implementation	1/1/04 to 12/31/06
Pre-Implementation 11.24-1	Blackwood Creek TMDL	<b>Objective:</b> Watershed restoration through the TMDL process  <b>Description:</b> To complete a TMDL and acquire Basin Plan and EPA Approval.	RWQCB-6	Nevada County	Completed TMDL	1/1/02 to 5/1/07
Implement 11.61	Timber Harvest Plan Waiver of Waste Discharge Requirements	<b>Objective:</b> To protect water quality from potential impacts related to timber activities.  <b>Description:</b> Develop a waiver for timber harvest activities that meet specified eligibility criteria and conditions.	RWQCB-6	Regionwide RB6	Adoption and implementation of waiver.	1/1/03 to 1/1/08
Implement 11.62-2	Timber Harvest Plan Review	<b>Objective:</b> To protect water quality from impacts of timber activities.  <b>Description:</b> To conduct pre- and post-harvest inspections and plan review.	RWQCB-6	Regionwide RB6	Completed plan reviews	7/1/03 to 6/30/08
Implement 4.034-2	Timber Harvest Plan review	<b>Objective:</b> Review of timber harvest plans  <b>Description:</b> Staff review of timber harvest plans and provide comments	RWQCB-2	Napa, Sonoma, and San Mateo Counties	Implementation of erosion control measures and habitat protections such as riparian buffer maintenance	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Track/Monitor 25.002-2	Inspection and Enforcement of Forest Practice Rules and THPs	<p><b>Objective:</b> Field inspection and enforcement of Forest Practice Rules and Timber Harvest Plan measures designed to prevent or mitigate impacts of timber harvest on water quality and aquatic habitat.</p> <p><b>Description:</b> Active Timber Harvest Plans receive regular field inspections during operations, at completion and during the post-completion, erosion control maintenance period. Corrective action and enforcement used as necessary to gain compliance and abate potential THP-related sources of water pollution.</p>	CDF	Statewide	Compliance with FPRs and implementation of THP mitigations.	7/1/03 to 6/30/08
Track/Monitor 25.003-1	Monitoring of FPR Implementation and Effectiveness	<p><b>Objective:</b> Monitor the implementation and effectiveness of the Forest Practice Rules in protecting water quality and aquatic habitat.</p> <p><b>Description:</b> Hillslope Monitoring Program (HMP) monitors 50 randomly selected THPs/NTMPs each year, using an outside contractor. Modified Completion Report Monitoring monitors 12.5% THPs, randomly selected from THP under going Completion Inspections, using CDF Forest Practice inspectors.</p>	BOF	Statewide	Proper implementation and effectiveness of FPRs designed to protect water quality.	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 2F Site Preparation/Forest Regeneration</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Track/Monitor 25.002-3	Inspection and Enforcement of Forest Practice Rules and THPs	<p><b>Objective:</b> Field inspection and enforcement of Forest Practice Rules and Timber Harvest Plan measures designed to prevent or mitigate impacts of timber harvest on water quality and aquatic habitat.</p> <p><b>Description:</b> Active Timber Harvest Plans receive regular field inspections during operations, at completion and during the post-completion, erosion control maintenance period. Corrective action and enforcement used as necessary to gain compliance and abate potential THP-related sources of water pollution.</p>	CDF	Statewide	Compliance with FPRs and implementation of THP mitigations.	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 2G Fire Management</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 19.007	Conversion Technology	<p><b>Objective:</b> Assess feasibility of using mechanically-thinned forest residuals, along with urban biomass, in new "conversion" facilities (e.g., gasification, hydrolysis)</p> <p><b>Description:</b> AB 2770 (Chapter 740, Statutes of 2002) requires the CIWMB to prepare a report on new and emerging conversion technologies (such as gasification and hydrolysis) that might be able to use biomass residuals to produce energy, alternative fuels, and other products. Conduct specific studies on lifecycle environmental and health impacts of conversion technologies and on the financial and economic impacts of developing such technologies on recycling and composting markets in California.</p>	CIWMB	Statewide	Selection of contractors; peer review of proposed methodologies; peer review of draft results; final reports on studies evaluating impacts of conversion technology development	1/1/03 to 6/30/04
Pre-Implementation 6.040	Fire Runoff Plan	<p><b>Objective:</b> Coordinate all local fire agencies and public works departments to develop water quality protection policy/plans for wildland and structural post-conflagrations.</p> <p><b>Description:</b> Combine existing fire and culvert and debris basin maintenance plans at a regional level.</p>	RWQCB-4	Regionwide RB4	When policy and plans are established and implemented	4/1/01 to 4/1/04
Implement 11.55-2	Firefest	<p><b>Objective:</b> To promote watershed protection, particularly from the impacts of large scale wildfire</p> <p><b>Description:</b> Participation in community event to educate about water quality and impacts from catastrophic wild fires.</p>	RWQCB-6	El Dorado County	Participation in the event on an annual basis.	7/1/03 to 6/30/08



**Table IIIB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 25.005	Vegetation Management Program	<b>Objective:</b> Sponsor various project to reduce fuels and create firebreaks to prevent catastrophic wildfires the	CDF	Statewide forest lands	Reduction if the number, size and severity of catastrophic wildfire which actually result in water quality problems.	7/1/03 to 6/30/08
		<b>Description:</b> Wildland fuels reduction and firebreak creation.				
Implement 4.035	Timber -- Prescribed Burn Plans review	<b>Objective:</b> Review and comment on burn plans.	RWQCB-2	Napa, Marin, San Mateo, and Santa Clara Counties	Little to no sediment runoff from burn areas, incorporation of erosion control measures.	7/1/03 to 6/30/08
		<b>Description:</b> Review plans, provide comments and technical input				

**Management Measure: 2H    Revegetation of Disturbed Areas**

Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Implement 11.52-2	Tahoe Forest Stewardship Day	<b>Objective:</b> To reduce erosion from wild fire and fuel hazard reduction projects; public education and outreach  <b>Description:</b> Volunteers help stabilize slopes by spreading slash and planting native plants	RWQCB-6	El Dorado County	Restored areas; annual participation in the event.	7/1/03 to 6/30/08

**Management Measure: 2I    Forest Chemical Management**

Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Implement 9.010-2	Timber Harvest Plan Review	<b>Objective:</b> Assure that timber harvest plans are protective of water quality.  <b>Description:</b> Review and recommend changes as needed to timber harvest plans to reduce risk of NPS pollution from timber harvest activities.	RWQCB-5R	Mountainous areas of R5	MPs implemented.	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 2K Postharvest Evaluation</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 27.009	Cross Training and Outreach	<p><b>Objective:</b> Establish periodic cross-training forums between state agencies to encourage mutual understanding of issues, problem resolution, and support for water quality issues.</p> <p><b>Description:</b> Present at least one workshop per year related to the understanding of landslides and sediment production on steep forested slopes.</p>	DOC	Statewide	Completion of workshops for consulting geologists.	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 2L Education/Outreach</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 11.24-3	Blackwood Creek TMDL	<b>Objective:</b> Watershed restoration through the TMDL process <b>Description:</b> To complete a TMDL and get Basin Plan approval.	RWQCB-6	Nevada County	Completed TMDL	7/1/03 to 1/1/08
Pre-Implementation 27.008-2	Landslide and Geomorphic Mapping	<b>Objective:</b> Identify potential sources of landsliding and sedimentation through programs for landslide and geomorphic mapping. <b>Description:</b> Prepare landslide maps and geomorphic stream channel maps at a scale of 1:24,000 based on geology and prioritized watersheds on the north coast.	DOC	North Coast	Completion of maps within expected time frames.	7/1/03 to 6/30/08
Implement 11.52-1	Tahoe Forest Stewardship Day	<b>Objective:</b> To reduce erosion from wild fire and fuel hazard reduction projects; public education and outreach. <b>Description:</b> Volunteers help stabilize slopes by spreading slash and planting native plants.	RWQCB-6	EI Dorado County	restored areas; annual participation in the event.	7/1/03 to 6/30/08
Implement 11.55-1	Firefest	<b>Objective:</b> To promote watershed protection, particularly from the impacts of large scale wildfire <b>Description:</b> Participation in community event to educate about water quality and impacts from catastrophic wild fires.	RWQCB-6	EI Dorado County	Participation in the event on an annual basis.	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 2.109	Interagency Cross-training	<p><b>Objective:</b> To facilitate interagency cross-training efforts that will improve understanding and effectiveness with respect to forestry and wildland management that is respective of water quality.</p> <p><b>Description:</b> Oversee the development of interagency cross-training programs, secure funding and conduct the cross training programs.</p>	SWRCB	California forested and wildlands	Effective cross-training programs that improve interagency relations and collaboration	7/1/03 to 6/30/08
Implement 9.010	Timber Harvest Plan Review	<p><b>Objective:</b> Assure that timber harvest plans are protective of water quality.</p> <p><b>Description:</b> Review and recommend changes as needed to timber harvest plans to reduce risk of NPS pollution from timber harvest activities.</p>	RWQCB-5R	Mountainous areas of R5	MPs implemented.	7/1/03 to 6/30/08
Implement 9.010-3	Timber Harvest Plan Review	<p><b>Objective:</b> Assure that timber harvest plans are protective of water quality.</p> <p><b>Description:</b> Review and recommend changes as needed to timber harvest plans to reduce risk of NPS pollution from timber harvest activities.</p>	RWQCB-5R	Mountainous areas of R5	MPs implemented.	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: All-F All Forestry Measures</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 2.101	Forestry/Wildland Management Technical/Policy Input	<p><b>Objective:</b> Ensure that SWRCB becomes well-informed in order to make effective decisions involving forestry regarding other wildland management matters.</p> <p><b>Description:</b> Provide timely, reliable and practicable technical and policy information as directed or requested by SWRCB management. Information may include evaluating wildland management matters, legal petitions, public comments and making appropriate recommendations to the Board.</p>	SWRCB	Forestry and Wildlands of California	A Board that is well-informed and advised on matters of Forestry and Wildland Management.	7/1/03 to 6/30/08
Pre-Implementation 2.102	Forestry Activities Program Consistency and Effectiveness	<p><b>Objective:</b> To Ensure that SWRCB and RWQCBs apply consistent effective policy and approach in dealing with forestry and other wildland management agencies, organizations, and activities.</p> <p><b>Description:</b> The activity will include maintaining oversight of RWQCBs activities, and facilitation of and encouraging development of consistent and effective policies and approaches in forestry and wildland management, securing funding for the Forestry Activities Program, and conducting quarterly Forestry Activities Roundtables with the RWQCBs.</p>	SWRCB	California Forests and Wildlands	State consistency in Forestry and Wildland management policies.	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 2.103	Review of Statutory Amendments	<b>Objective:</b> Evaluate State and Federal statutory amendments related to forestry and wildland management activities to ensure that they are preventive of NPS pollution.	SWRCB	California forested and wildlands	All new State and Federal statutory amendments are evaluated relative to NPS pollution issues, and appropriate improvements to them are made.	7/1/03 to 6/30/08
		<b>Description:</b> Review proposed statutory amendments affecting forested watersheds, forest practices, and State regulation thereof.				
Pre-Implementation 2.104	Forest Practice Rule Amendments	<b>Objective:</b> Evaluate forest practice standards and implementation procedures set forth in proposed Forest Practice Rules to ensure that they are preventive of NPS pollution.	SWRCB	California forested and wildlands	All new Forest Practice Rule changes are evaluated relative to NPS pollution issues, and appropriate improvements to them are made.	7/1/03 to 6/30/08
		<b>Description:</b> Review proposed Forest Practice Rule changes affecting forested watersheds, forest practices, and State regulation thereof, and/or propose necessary FPR amendments to BOF. Participate with BOF and other agencies or stakeholders in refining proposed amendments.				
Pre-Implementation 2.105	USFS Landscape-scale Planning	<b>Objective:</b> Evaluate USFS landscape-scale plans to ensure that they are preventive of NPS pollution.	SWRCB	California forested and wildlands	All new USFS landscape-scale plans are evaluated relative to NPS pollution issues, and appropriate improvements to them are made.	7/1/03 to 6/30/08
		<b>Description:</b> Review proposed USFS landscape-scale plans affecting forested watersheds, and participate with USFS and other stakeholders in refining plans.				

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 2.106	Collaborative Watershed and Monitoring Approaches	<p><b>Objective:</b> To facilitate collaboration between State and federal agencies as they relate to each other on forest or rangeland activities.</p> <p><b>Description:</b> Oversee the development of watershed cumulative effects approach MOUs as well as collaborative monitoring MOUs with other State agencies addressing objectives, collaborate with federal land and resource management agencies in attaining objectives, secure funding for implementation, and oversee the implementation.</p>	SWRCB	California forested and wildlands	Sufficient collaboration between State and federal agencies on forest or rangeland activities, such that water quality pollution prevention is enhanced.	7/1/03 to 6/30/08
Pre-Implementation 2.107	Joint BOF and SWRCB Policy Statement	<p><b>Objective:</b> To facilitate the development, adoption and implementation of a joint SWRCB and BOF policy statement.</p> <p><b>Description:</b> To oversee the development, adoption and implementation of a SWRCB and BOF joint policy statement by.....</p>	SWRCB	California forested and wildlands	An effective Joint Policy Statement that is protective of water quality.	7/1/03 to 6/30/08
Pre-Implementation 2.108	Water Quality Management Plan and MAA Changes	<p><b>Objective:</b> To ensure that the WQMP and MAA between SWRCB and BOF-CDF is updated to include recent changes in relevant environmental regulations.</p> <p><b>Description:</b> Oversee changes to and adoption of MAA attachments, secure funding needed for implementation, and oversee implementation of modified MAA provisions.</p>	SWRCB	California forested and wildlands	Revisions to the WQMP and MAA that are up-to-date and include recent relevant environmental regulations.	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre Implementation 23.001	Forest Practice Rule (FPR) Review and Modification	<p><b>Objective:</b> Review Forest Practice Rules for gaps and needed modifications. Draft and adopt new Forest Practice Rules where needed (e.g. a new package of FPRs covering road management).</p> <p><b>Description:</b> Review of Forest Practice Rule (FPR) effectiveness in protecting water quality. Identification of practices that need improvement. Drafting and adoption of new Forest Practice Rules to correct identified effectiveness problems.</p>	BOF	Regions 1, 2, 3, 5 and 6	Timely identification of gaps and needed FPR modification. Timely drafting and adoption of new FPRs to address the identified gaps and needed modifications.	7/1/03 to 6/30/08
Pre-Implementation 25.001-1	Timber Harvest Planning Process (THP)	<p><b>Objective:</b> Mitigation of potential projects impacts on water quality through pre-harvest planning.</p> <p><b>Description:</b> THPs submitted to CDF are reviewed by CDF and cooperating agencies. Any needed modifications and mitigations to protect water quality are added to each THP before the THP is approved and operations can begin.</p>	CDF	Statewide	Each THP when implemented properly protects water quality.	7/1/03 to 6/30/08



**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 28.007	Forestry Management Practices	<p><b>Objective:</b> Identify and assess DPR lands impacted or influenced by these forestry practices:</p> <ol style="list-style-type: none"> <li>1. Preharvest planning</li> <li>2. Streamside management areas</li> <li>3. Road construction/reconstruction</li> <li>4. Road management</li> <li>5. Timber harvesting</li> <li>6. Site preparation</li> <li>7. Where forest regeneration should be used to restore natural forest plant communities</li> <li>8. Fire management: Wildfire, Prescribed fire and Natural fire</li> <li>9. Revegetation of disturbed areas</li> <li>10. Chemical use</li> <li>11. Wetland forest areas</li> <li>12. Post-harvest evaluation</li> </ol>	DPR	State Park System units	Application of the best forest management practices will occur adjacent to and on DPR lands.	7/1/03 to 6/30/08
Pre-Implementation 5.201	Evaluate timber harvest, mgnt & restoration plans for BMPs	<p><b>Objective:</b> Timber Harvest Plan review process.</p> <p><b>Description:</b> Participate on review team. Implement monitoring selectively.</p>	RWQCB-3	Northern Watershed Management Area	No impairment of nearby waters.	7/1/03 to 6/30/08

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 25.004-1	Jackson Demonstration State Forest Plan Implementation	<p><b>Objective:</b> Manage the Jackson Demonstration State Forest so as to protect and enhance water quality and aquatic habitat, while achieving the other objectives of the State Forest enumerated in the Management Plan.</p> <p><b>Description:</b> Jackson Demonstration State Forest Management Plan, which includes a Road Management Plan, will be implemented on the ground.</p>	CDF	Jackson Demonstration State Forest	Sediment source reduction. Streamside canopy meets or exceeds standards.	1/1/03 to 6/30/08
Implement 3.007	Logging - Private Lands	<p><b>Objective:</b> Attend CDF Review Team meetings and inspections to gain compliance with Basin Plan waste discharge prohibitions and water quality objectives.</p> <p><b>Description:</b> Review Team functions, public complaint inspections and follow-up enforcement, water quality monitoring.</p>	RWQCB-1	Regionwide RB1	Compliance with Federal and State water quality regulations.	7/1/98 to 6/30/08
Implement 3.008	Logging - US Forest Service	<p><b>Objective:</b> Compliance with Federal and state water quality regulations through implementation of the 208 Management Agency Agreement (MAA).</p> <p><b>Description:</b> All staff activities towards implementation of the MAA, including NEPA reviews, complaint inspections, and enforcement.</p>	RWQCB-1	Regionwide RB1	Compliance with Federal and State water quality regulations.	7/1/03 to 6/30/08

**SECTION IV  
URBAN CATEGORY  
FIVE-YEAR IMPLEMENTATION PLAN  
July 2003 through June 2008**

**A. URBAN CATEGORY MMs AND ISSUES OF CONCERN**

The SWRCB, CCC and other State agencies have identified fifteen MMs to address urban sources of pollution, which utilize two primary strategies: (1) the prevention of pollutant loadings and (2) the treatment of unavoidable loadings. The Urban Category MM strategy emphasizes pollution prevention and source reduction practices over treatment practices, as the most cost-effective means of controlling urban runoff pollution, including that caused by faulty septic systems, from affecting waters of California. The fifteen Urban Category MMs are listed in Table IVA below, and further described in Appendix II of this document.

**Table IVA  
Urban Category MMs**

MM Code	Urban MM Title
3.1	Runoff from Developing Areas
A.	Watershed Protection
B.	Site Development
C.	New Development
3.2	Runoff from Construction Sites
A.	Construction Site Erosion and Sediment control
B.	Construction Site Chemical Control
3.3	Runoff from Existing Development
A.	Existing Development
3.4	On-site Disposal Systems (OSDS)
A.	New OSDSs
B.	Operating OSDSs
3.5	Transportation Development (Roads, Highways, and Bridges)
A.	Planning, Siting, and Developing Roads and Highways
B.	Bridges
C.	Construction Projects
D.	Chemical Control
E.	Operation and Maintenance
F.	Road, Highway, and Bridge Runoff Systems
3.6	Education/Outreach
A.	Pollution Prevention/Education: General Sources

The Urban Category of the NPS Program addresses pollutants in storm water and non-storm water that are carried by runoff from urbanized areas. As water washes over the land, whether it comes from rain, car washing or the watering of lawns, it intercepts and picks up an array of contaminants that it encounters along the way. These contaminants include a wide variety of material, such as oil, sand, de-icing chemicals, litter, bacteria, nutrients, toxic materials and general debris from urban and

suburban areas. Construction is a major source of sediment erosion, petroleum hydrocarbons result mostly from automobile sources, nutrient and bacterial contaminants include garden fertilizers, yard waste, and animal waste. The operation of faulty septic systems can also lead to groundwater and surface water contamination with nutrients, sediment and pathogens. As populations increase, the potential for increase in pollutant loadings in runoff also increases, and this runoff will eventually find its way into waterways, either directly or through constructed storm drain diversions.

Table IVB for the NPS Urban Category provides the activities that California agencies will be involved in over the next five-year period to reduce and prevent urban runoff pollution, including pollution from on-site disposal systems (OSDSs). Some NPS activities might include utilization of vegetated treatment systems to control discharges of urban NPS pollution. In these instances the activities will be listed in the Wetlands and Riparian Category (Section VII) under Wetlands MM 6C, Vegetated Treatment Systems. A description of the role of various programs in California, with respect to urban NPS pollution control, the five-year objectives for the NPS Urban Category, and the specific activities that will address these objectives are provided below.

## **B. RELATION TO OTHER STATE PROGRAMS:**

California is committed to prevention and control of the runoff pollution that occurs with increasing urbanization on the coastal zones, along inland waters, and to groundwaters of the State. The NPS Program Plan acknowledges the types of pollution that are derived from urban runoff, which are addressed through a variety of regulatory and non-regulatory programs in the State. Each State department and program may have separate and distinct programmatic objectives and authorities to enforce them, but all maintain the common goal of reducing or eliminating the effects of polluted runoff in waters of the State.

There are some State programs that are sufficiently similar in their objectives, that additional clarification of the differences between them is necessary. These programs include the TMDL and the NPDES Stormwater Programs as implemented by SWRCB and the RWQCBs; the coastal planning and permitting programs that are under the jurisdiction of the California Coastal Commission (CCC) and San Francisco Bay Conservation Development Commission (BCDC); and other local ordinances and initiatives. All of these play a role in the strategy that California is utilizing to address urban sources of pollution and are described below.

### **1. SWRCB and RWQCB's Impaired Water Bodies List and TMDLs**

Under Section 303(d) of the Clean Water Act, California is required to compile a list of impaired waters that fail to meet applicable water quality objectives or that cannot support their beneficial uses. This list, called the '303(d)' list is submitted to Congress every two years, and California is required to develop a Total Maximum Daily Load (TMDL) for each pollutant causing impairment to the waterbodies that are listed. California maintains a list of impaired water bodies which is a combination of those identified in the 303(d) listing, in the TMDL list that remain impaired, and in water bodies that are otherwise not meeting beneficial uses.

The key steps in TMDL development include defining the problem, including determining the causes of impairment, selecting appropriate numeric targets for the given pollutants, identifying sources of pollutant loadings, evaluating the linkage between pollutant loading and in-stream response, allocating portions of the available load to the various dischargers, and identifying follow-up monitoring needs. Once the TMDL has been completed, a TMDL implementation plan will be developed to remedy the impaired water body.

Over the next five-year period, California is planning to expend significant funds and effort to develop the TMDLs for water bodies identified on the 303(d) list, and to develop pollution reduction implementation plans for those that have completed TMDLs. These TMDL implementation plans utilize the MMs identified in California's NPS Program Plan (or other MMs where appropriate) where the source(s) of impairment are NPS.

## **2. SWRCB and RWQCB's NPDES Stormwater Program**

The Urban NPS Program and Storm Water Programs are intricately linked in that both programs address aspects of urban runoff pollution. With respect to programs within the SWRCB and the RWQCBs, urban runoff is addressed primarily through the National Pollution Discharge Elimination System (NPDES) Permitting Program, although the SWRCB NPS Program will apply where the runoff is not regulated as a permitted point source discharge.

This permitted 'point source' system of addressing urban runoff pollution is the result of the Water Quality Act of 1987, which amended the federal Clean Water Act to require NPDES permits for certain categories of storm water discharges. These 'categories' of storm water discharges are described as follows:

Phase I of the Storm Water program, defined in federal regulation in 1990, includes storm water discharges associated with "industrial" activities (as defined by the regulations), construction activities that disturb five acres of land or more, and discharges from municipal separate storm sewer systems (MS4s) serving populations of 100,000 people or more. Phase II of the Storm Water program, defined in federal regulations in 1999, expanded the program to require NPDES permits for discharges from construction sites disturbing between one and five acres, from Small MS4s that serve populations of less than 100,000, from some other governmental facilities, and from industrial facilities owned by small municipalities. The expansion of the Storm Water program through Phase II has therefore expanded the applicability of the NPDES point source program to a greater number of communities, businesses, government facilities, and industries. The result is that most urban runoff in California is now subject to NPDES permits.

The expansion of the storm water NPDES program has resulted in applying NPDES requirements in areas where NPS was previously the sole regulatory program. It is important to understand that the NPDES program supercedes the SWRCB or RWQCB NPS Program in the areas where there is overlap. NPDES permits require implementation of best management practices (BMPs), which may or may not be similar to the MMs in the NPS Program. However, the SWRCB/RWQCB's NPDES program does not supercede the planning and land-use activities of other State agencies, such as the CCC or the SFBCDC, which they are responsible for implementing under their own regulatory authorities.

The SWRCB/RWQCB NPDES permits are at least as stringent as the NPS Program, and will ensure at least the same level of compliance and water quality protection as the NPS Program's Management Measures provide; where relevant and appropriate, the NPS MMs will continue to be considered as BMPs. Further, the authority of the SWRCB/RWQCB NPS Program will still apply for land use activities not covered by NPDES permits, and for municipalities, construction sites and industries that fall outside of the Phase I and Phase II Storm Water Programs.

## **3. Local Coastal Planning and Permitting**

In 1976, the State Legislature enacted the California Coastal Act to provide for the conservation and planned development of the State's coastline. The Coastal Act mandates the protection and restoration of coastal waters pursuant to several sections in the Public Resources Code. Mandated objectives include:

- To maintain, enhance, and, where feasible, restore marine resources;
- To maintain and, where feasible, restore biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes through, among other means, minimizing adverse effects of wastewater discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging wastewater reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams; and
- To carry out a public education program to promote coastal conservation.

In order to carry out these policies, the Coastal Act delegates to local governments specified authority to regulate coastal development. The Coastal Act directs each of the 73 coastal cities and counties to prepare, for review and certification by the California Coastal Commission (CCC), a local coastal plan (LCP) which will manage resources of State, regional, and national significance in ways that respect special circumstances in each locality. An LCP consists of a local government's land use plans (LUPs), zoning ordinances, zoning district maps, and, within sensitive coastal resource areas, other implementing actions. The CCC works with local governments to tailor LCPs to reflect local issues and concerns while simultaneously meeting the statewide goals and policies of the Coastal Act, as well as federal CWA, Storm Water, and other State water quality requirements. Until the CCC has certified a locality's LCP as consistent with Coastal Act requirements, the CCC is generally responsible for reviewing coastal development permit (CDP) applications for development within that jurisdiction.

Upon LCP certification, the local government reviews CDP applications for consistency with LCP policies. The local government can approve, conditionally approve, or deny applications, subject to the requirements of the LCP. However, some local government actions on certain categories of development may be appealed to the CCC. CDPs and certified LCPs are important tools for implementing urban runoff MMs and MPs within the Coastal Zone. Storm water programs can become more effective because of local planning and permitting decisions throughout the State. In the Coastal Zone, those local decisions must conform to the policies of the California Coastal Act or to a certified LCP, as well. Where the CCC has jurisdiction, it's staff is routinely requesting the development permit applicants to incorporate NPS MMs and MPs that will prevent, reduce or treat polluted runoff from their proposed developments. CCC staff is also working with local governments to incorporate urban MMs and MPs into their respective LCPs. Policy guidance and assistance to local governments to facilitate coordinated implementation of municipal storm water systems, NPS Urban MMs and Coastal Act water quality requirements is also provided.

In 1965, the California Legislature created the San Francisco Bay Conservation and Development Commission (BCDC) in response to broad public concern over the future of San Francisco Bay. It was also established in order to accomplish two primary goals: preventing unnecessary filling of San Francisco Bay and increasing public access to and along the Bay shoreline. BCDC has regulatory and planning authority over development in San Francisco Bay and along the Bay's nine-county shoreline and is responsible for carrying out two state laws – the McAteer-Petris Act

and the Suisun Marsh Preservation Act – and two plans, the *San Francisco Bay Plan* and the *Suisun Marsh Protection Plan*. These laws and plans were adopted to protect the Bay and the Suisun Marsh as significant natural resources for the benefit of the public and to encourage development compatible with this protection. The types of activities that require a permit include the placement of fill, dredging or other extraction of materials, any substantial change in the use of an area, and most development in the Suisun Marsh.

Within its jurisdiction and authority, the BCDC seeks to prevent NPS pollutants from entering the Bay through its permit and enforcement actions and by partnering with applicants, other public agencies, such as the San Francisco Bay Regional Water Quality Control Board (RWQCB 2), and non-governmental organizations. In this way, BCDC carries out its Bay Plan water quality policies. To illustrate, recent amendments to these Bay Plan policies emphasize 1) siting, design construction and maintenance for new projects in order to prevent or minimize the discharge of pollutants to the Bay; 2) evaluating and implementing management practices such as vegetated swales and permeable pavement materials, etc. to offset impacts from increased impervious areas and land disturbances; and 3) providing vegetation buffers to control pollutants from entering the Bay. The policies require the application of appropriate, accepted and effective best management practices to projects to prevent nonpoint source pollution.

## **C. OBJECTIVES AND ACTIVITY SUMMARY**

The Urban Category Objectives and agency activities that are developed to address these objectives are provided below.

### **1. Urban Category Objectives**

The State of California recently undertook a concerted, collaborative process for the development of Category Objectives for the NPS Implementation Plan 2003-2008. Over a period of approximately one year, the Statewide Interagency Coordinating Committee met frequently to consider the missions of each agency relative to sources of pollution in urban runoff; to formulate a means for collaboration, and to set overall objectives for the collaborative process. The urban category objectives listed below are the result of this effort. They are designed to formulate the focus of California relative to Urban NPS pollution prevention and guide and measure the progress that will be made over the next five years.

- a. Coordinate with the SWRCB and RWQCB TMDL staff and managers to include NPS MMs in the TMDL Implementation Plans, as appropriate.
- b. Promote coordination of interagency programs that protect water quality from urban runoff pollution.
- c. Through the implementation of MMs, reduce the potential for contamination of surface and groundwater that results from uncontrolled or poorly-controlled urban runoff practices.
- d. Develop tools to assess the effectiveness of urban water pollution programs
- e. Increase the availability of regulatory and guidance documents and/or instructional workshops to demonstrate effective urban pollution control programs and policies.

- f. Reduce the number of uncontrolled NPS pollution sources by increasing the number of municipalities, industries and construction sites that utilize NPS MMs and/or fit under the permitted State Storm Water Program.
- g. Support the development and implementation of watershed-based plans, including TMDLs and Storm Water Pollution Prevention Plans (SWPPPs), in order to identify and address impacts from urban land use.

## **2. Activity Summary for California**

For 2003 to 2008, there will be activities designed specifically for each of the 15 MMs, except for the transportation-related measures: 3.5B, 3.5C, 3.5D, 3.5E, 3.5F (i.e., Bridges, Construction Projects, Chemical Control, Operation and Maintenance, and Road, Highway, and Bridge Runoff Systems). The activities' focus for this period will be on education/outreach, runoff from existing development, and watershed protection. In addition, there will be generic activities that apply to all MMs.

Many of the proposed activities will facilitate implementation of the TMDL program and achieve other significant objectives such as promoting interagency coordination on urban NPS efforts and increasing issue awareness by developing new guidance documents and instructional workshops. The Urban Category activities for this Five-Year Plan are provided in Table IVB.



**Table IVB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

**Urban**

**Management Measure: 3.1A Runoff from Developing Areas - Watershed Protection**

Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Pre-Implementation 11.25-3	Squaw Creek TMDL	<b>Objective:</b> Watershed restoration through the TMDL process <b>Description:</b> Complete and implement the TMDL for Squaw Creek	RWQCB-6	Nevada County	completed TMDL	7/1/03 to 1/1/03
Pre-Implementation 11.26-2	Ward Creek TMDL	<b>Objective:</b> Watershed restoration through the TMDL program <b>Description:</b> Complete and implement the TMDL for Ward Creek	RWQCB-6	Placer County	completed TMDL	1/1/02 to 5/1/07
Pre-Implementation 2.609-1	Lake Natoma mercury study	<b>Objective:</b> Determine if urban/suburban runoff is creating conditions suitable for mercury methylation. <b>Description:</b> Methylation environment comparison between an urbanized watershed and a nearby unurbanized watershed. Prior study of Lake Natoma revealed higher mercury bioaccumulation rates in fish from the urbanized creek corridor compared to the undeveloped creek corridor. Followup study would test the hypothesis that environmental differences between the two watersheds may be the cause. If hypothesis is correct, could result in MPs for suppressing mercury methylation based on managing urban runoff.	SWRCB	Sacramento County	Demonstrated effect on methylation by environment	7/1/03 to 6/30/08

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 2.611	Dredger Tailings Workgroup	<p><b>Objective:</b> Determine if development or other land uses involving dredger tailings is causing mercury loading into aquatic systems. Determine safe construction methods for such areas.</p> <p><b>Description:</b> Evaluate the risk posed by developing dredger tailings. Pursue selective studies to determine the risk.</p>	SWRCB	East Side of the Sacramento Valley	Completion of evaluation	7/1/03 to 6/30/08
Pre-Implementation 22.007-1	MURP and NEMO	<p><b>Objective:</b> To educate municipal officials and planning staff on relationship between land use and water quality. Continue to assist local governments in implementation of MMs to control urban polluted runoff.</p> <p><b>Description:</b> Develop outreach materials and conduct workshops to implement program objectives. Continue coordination and collaboration with partner agencies. Support the implementation of BMPs contained in the revised BMP handbook developed by CASQA.</p>	CCC	Statewide with initial pilot implementation in Southern CA	Completion of outreach materials and workshops.	7/1/03 to 6/30/08
Pre-Implementation 4.038-1	Urban Pesticide Committee Support	<p><b>Objective:</b> To support the Urban Pesticide Committee in coordinating activities of SF Bay Area and Central Valley</p> <p><b>Description:</b> Facilitate meetings of Urban Pesticide Committee</p>	RWQCB-2	SF Bay Area and Central Valley	Exchange of information and technical assistance	7/1/03 to 12/31/08
Pre-Implementation 4.042-1	TMDL for Chlordane, San Francisco Bay	<p><b>Objective:</b> Develop TMDL for legacy pesticides (chlordane) in San Francisco Bay</p> <p><b>Description:</b> TMDL development, Basin Plan amendment</p>	RWQCB-2	San Francisco Bay	Preliminary and final reports, BP amendment	7/1/04 to 6/30/07
Pre-Implementation 4.044-1	TMDL for Siltation, San Francisquito Creek	<p><b>Objective:</b> Develop and implement TMDL.</p> <p><b>Description:</b> Develop and implement TMDL for siltation in San Francisquito Creek</p>	RWQCB-2	San Mateo and Santa Clara Counties	Completed TMDL, quantifiable pollutant reduction goals	7/1/03 to 4/30/06

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 4.046-1	TMDL for Dissolved Oxygen, TOC, trash, Lake Merritt	<p><b>Objective:</b> Develop and Implement TMDL</p> <p><b>Description:</b> Develop TMDL for Lake Merritt for dissolved oxygen, total organic carbon, and trash</p>	RWQCB-2	Alameda County	Preliminary report	5/1/05 to 6/30/08
Pre-Implementation 4.047-1	TMDL for Mercury, Lake Herman	<p><b>Objective:</b> Develop and implement TMDL</p> <p><b>Description:</b> TMDL development for mercury for Lake Herman</p>	RWQCB-2	Solano County	Completion of TMDL preliminary report	6/30/07 to 6/30/08
Pre-Implementation 4.086-1	TMDL for Mercury, San Francisco Bay	<p><b>Objective:</b> Develop TMDL for mercury in San Francisco Bay</p> <p><b>Description:</b> TMDL for mercury for San Francisco Bay</p>	RWQCB-2	San Francisco Bay	Basin Plan amendment	7/1/03 to 12/31/03
Implement 19.009-3	Pollution Prevention/Education	<p><b>Objective:</b> To establish and maintain used oil and household hazardous waste (hhw) collection programs in all CA jurisdictions. To increase used oil/hhw recycling rates in CA. To educate the public about oil-related storm water pollution prevention and assist local jurisdictions in implementing measures that mitigate oil in storm water.</p> <p><b>Description:</b> Provide local jurisdictions with Used Oil Block and Local Government Opportunity grants and provide non profits with Non Profit grants to: 1) establish and maintain used oil and household hazardous waste collection facilities/programs throughout the state; 2) educate public about proper management and disposal of used oil/hhw and the location of used collection facilities/programs; 3) implement measures that mitigate oil in storm water.</p>	CIWMB	Statewide	Facilities and programs established and operating in all jurisdictions.	7/1/03 to 6/30/08

**Table IVB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 20.001-1	Permit NPS Criteria Development	<p><b>Objective:</b> Develop model language that incorporates NPS criteria into permits and variances.</p> <p><b>Description:</b> Continuously review permit requirements for incorporation of applicable model NPS Criteria.</p>	DTSC	Statewide	Permits reflect appropriate NPS language and requirements.	1/1/03 to 6/30/08
Implement 20.002-1	Permit NPS Criteria Training	<p><b>Objective:</b> Provide staff training on model NPS criteria for permits and variances.</p> <p><b>Description:</b> Develop and provide training on model language as it is developed and revised.</p>	DTSC	Statewide	Model language is incorporated routinely into permits and variances.	6/1/03 to 6/30/08
Implement 20.003-1	Permit NPS Model Language Incorporation	<p><b>Objective:</b> Incorporate model language regarding NPS criteria into each permit and variance to which it is applicable.</p> <p><b>Description:</b> Update permits.</p>	DTSC	Statewide	NPS language incorporated into permits	6/1/03 to 6/30/08
Implement 4.040-1	Erosion Control Workshops	<p><b>Objective:</b> Reduce impacts of erosion control from new and redevelopment activities</p> <p><b>Description:</b> Conduct 7-10 BMP workshops annually for local agencies and developers.</p>	RWQCB-2	Regionwide RB2	Attendance at workshop and compliance with erosion control BMPs	7/1/03 to 12/31/08
Implement 4.043-1	TMDL for PCBs, San Francisco Bay	<p><b>Objective:</b> Develop and implement TMDL</p> <p><b>Description:</b> Final report and prepare Basin Plan amendment</p>	RWQCB-2	San Francisco Bay	Completed report and amendment	7/1/03 to 3/30/04

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 4.049-1	Manage contract for mercury reduction	<p><b>Objective:</b> Oversee grant for mercury reduction projects to reduce erosion of contaminated sediments.</p> <p><b>Description:</b> Mercury reduction demonstration projects, preparation of guidance document</p>	RWQCB-2	Santa Clara County	Completion of projects and guidance document	7/1/03 to 12/31/05
Implement 4.077-1	Manage contract Urban Stormwater Retrofit Projects	<p><b>Objective:</b> Oversight of grant to implement stormwater BMP retrofit sites</p> <p><b>Description:</b> Implement 2 stormwater retrofit sites with measures such as cisterns, driveway drywells, vegetated swales, permeable pavement, etc. as demonstration projects.</p>	RWQCB-2	Santa Clara County	Implementation of projects	7/1/03 to 12/31/06
Implement 6.049-2	TMDL Implentation for Malibu Creek-Nutrients	<p><b>Objective:</b> MP implementation</p> <p><b>Description:</b> Develop TMDL implementation plan and reschedule of implementation</p>	RWQCB-4	Los Angeles County	Delisting on 303 (d) list	7/1/03 to 6/30/08
Report 6.0670	Urbanization and Stream Erosion Prevention Model	<p><b>Objective:</b> Develop numeric standards and guidelines for protecting stream channels and habitat from runoff rate and volume modifications.</p> <p><b>Description:</b> Field measurements and computer modeling of hydrologic system (upper Arroyo Simi) and erosion in stream channels. Analysis and verification of model output, link flow rates to measured erosion, predict erosion for future development scenarios, evaluate BMPs for mitigation.</p>	RWQCB-4	Ventura County	Useable criteria/guidelines	7/1/03 to 7/1/08

**Table IVB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 3.1B Runoff from Developing Areas - Site Development</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 22.007-2	MURP and NEMO	<p><b>Objective:</b> To educate municipal officials and planning staff on relationship between land use and water quality. Continue to assist local governments in implementation of MMs to control urban polluted runoff.</p> <p><b>Description:</b> Develop outreach materials and conduct workshops to implement program objectives. Continue coordination and collaboration with partner agencies. Support the implementation of BMPs contained in the revised BMP handbook developed by CASQA.</p>	CCC	Statewide with initial pilot implementation in Southern CA	Completion of outreach materials and workshops.	7/1/03 to 6/30/08
Implement 20.001-2	Permit NPS Criteria Development	<p><b>Objective:</b> Develop model language that incorporates NPS criteria into permits and variances.</p> <p><b>Description:</b> Continuously review permit requirements for incorporation of applicable model NPS Criteria.</p>	DTSC	Statewide	Permits reflect appropriate NPS language and requirements.	1/1/03 to 6/30/08
Implement 20.002-2	Permit NPS Criteria Training	<p><b>Objective:</b> Provide staff training on model NPS criteria for permits and variances.</p> <p><b>Description:</b> Develop and provide training on model language as it is developed and revised.</p>	DTSC	Statewide	Model language is incorporated routinely into permits and variances.	6/1/03 to 6/30/08
Implement 20.003-2	Permit NPS Model Language Incorporation	<p><b>Objective:</b> Incorporate model language regarding NPS criteria into each permit and variance to which it is applicable.</p> <p><b>Description:</b> Update permits.</p>	DTSC	Statewide	NPS language incorporated into permits	6/1/03 to 6/30/08

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 3.1C Runoff from Developing Areas - New Development</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 11.44-1	Mammoth Creek TMDL	<b>Objective:</b> Watershed restoration through the TMDL program <b>Description:</b> Complete and implement the TMDL for Mammoth Creek	RWQCB-6	Mono County	completed TMDL	1/1/05 to 1/1/08
Pre-Implementation 22.007-3	MURP and NEMO	<b>Objective:</b> To educate municipal officials and planning staff on relationship between land use and water quality. Continue to assist local governments in implementation of MMs to control urban polluted runoff. <b>Description:</b> Develop outreach materials and conduct workshops to implement program objectives. Continue coordination and collaboration with partner agencies. Support the implementation of BMPs contained in the revised BMP handbook developed by CASQA.	CCC	Statewide with initial pilot implementation in Southern CA	Completion of outreach materials and workshops.	7/1/03 to 6/30/08
Implement 20.001-3	Permit NPS Criteria Development	<b>Objective:</b> Develop model language that incorporates NPS criteria into permits and variances. <b>Description:</b> Continuously review permit requirements for incorporation of applicable model NPS Criteria.	DTSC	Statewide	Permits reflect appropriate NPS language and requirements.	1/1/03 to 6/30/08
Implement 20.002-3	Permit NPS Criteria Training	<b>Objective:</b> Provide staff training on model NPS criteria for permits and variances. <b>Description:</b> Develop and provide training on model language as it is developed and revised.	DTSC	Statewide	Model language is incorporated routinely into permits and variances.	6/1/03 to 6/30/08

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 20.003-3	Permit NPS Model Language Incorporation	<p><b>Objective:</b>            Incorporate model language regarding NPS criteria into each permit and variance to which it is applicable.</p> <p><b>Description:</b>            Update permits.</p>	DTSC	Statewide	NPS language incorporated into permits	6/1/03 to 6/30/08
-----------------------	--	--	------	-----------	--	-------------------



**Table IVB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 3.2A Runoff from Construction Sites - Construction Site Erosion and Sediment Control</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 11.21-1	High Desert Stormwater Phase II Awareness Impact Project	<p><b>Objective:</b> Educational Outreach Program that implements management measure that prevent or reduce pollution.</p> <p><b>Description:</b> Implementation of a 30 month program to educate about impacts of urban runoff in order to reduce urban runoff. A 30 month program in six cities to demonstrate the potential impacts to water quality from urban runoff. Use of tabletop watershed model, CA Project WET and regional automotive fluids disposal program to demonstrate impacts of urban runoff nonpoint source pollution. Administration of surveys. Distribution of educational materials.</p>	RWQCB-6	San Bernardino, Los Angeles, Kern Counties	evaluation of comprehension and changes in behavior	12/1/02 to 12/1/06
Pre-Implementation 11.25-1	Squaw Creek TMDL	<p><b>Objective:</b> Watershed restoration through the TMDL process</p> <p><b>Description:</b> Complete and implement the TMDL for Squaw Creek</p>	RWQCB-6	Nevada County	completed TMDL	7/1/03 to 1/1/03
Pre-Implementation 11.26-1	Ward Creek TMDL	<p><b>Objective:</b> Watershed restoration through the TMDL program</p> <p><b>Description:</b> Complete and implement the TMDL for Ward Creek</p>	RWQCB-6	Placer County	completed TMDL	1/1/02 to 5/1/07
Pre-Implementation 11.40	Horseshoe Lake TMDL	<p><b>Objective:</b> watershed restoration through the TMDL program</p> <p><b>Description:</b> Complete and implement the TMDL</p>	RWQCB-6	San Bernardino County	completed TMDL for Horseshoe Lake	1/1/04 to 1/1/07

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 11.44-3	Mammoth Creek TMDL	<p><b>Objective:</b> Watershed restoration through the TMDL program</p> <p><b>Description:</b> Complete and implement the TMDL</p>	RWQCB-6	Mono County	completed TMDL	1/1/05 to 1/1/08
Pre-Implementation 2.609-2	Lake Natoma mercury study	<p><b>Objective:</b> Determine if urban/surbaban runoff is creating conditions suitable for mercury methylation.</p> <p><b>Description:</b> Methylation environment comparision between an urbanized watershed and a nearby unurbanized watershed. Prior study of Lake Natoma revealed higher mercury bioaccumulation rates in fish from the urbanized creek corridor compared to the undeveloped creek corridor. Followup study would to test the hypothesis that environmental differences between the two watersheds may be the cause. If hypothesis is correct, could result in MPs for supressing mercury methylation based on managing urban runoff.</p>	SWRCB	Sacramento County	Demonstrated effect on methylation by environment	7/1/03 to 6/30/08
Pre-Implementation 4.038-2	Urban Pesticide Committee Support	<p><b>Objective:</b> To support the Urban Pesticide Committee in coordinatng activities of SF Bay Area and Central Valley</p> <p><b>Description:</b> Facilitate meetings of Urban Pesticide Committee</p>	RWQCB-2	SF Bay Area and Central Valley	Exchange of information and technical assistance	7/1/03 to 12/31/08
Pre-Implementation 4.044-2	TMDL for Siltation, San Francisquito Creek	<p><b>Objective:</b> Develop and implement TMDL.</p> <p><b>Description:</b> Develop and implement TMDL for siltation in San Francisquito Creek</p>	RWQCB-2	San Mateo and Santa Clara Counties	Completed TMDL, quantifiable pollutant reduction goals	7/1/03 to 4/30/06

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 4.047-2	TMDL for Mercury, Lake Herman	<p><b>Objective:</b> Develop and implement TMDL</p> <p><b>Description:</b> TMDL development for mercury for Lake Herman</p>	RWQCB-2	Solano County	Completion of TMDL preliminary report	6/30/07 to 6/30/08
Implement 4.040-2	Erosion Control Workshops	<p><b>Objective:</b> Reduce impacts of erosion control from new and redevelopment activities</p> <p><b>Description:</b> Conduct 7-10 BMP workshops annually for local agencies and developers.</p>	RWQCB-2	Regionwide RB2	Attendance at workshop and compliance with erosion control BMPs	7/1/03 to 12/31/08
Implement 4.043-2	TMDL for PCBs, San Francisco Bay	<p><b>Objective:</b> Develop and implement TMDL</p> <p><b>Description:</b> Final report and prepare Basin Plan amendment</p>	RWQCB-2	San Francisco Bay	Completed report and amendment	7/1/03 to 3/30/04

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 3.3A Runoff from Existing Development - Existing Development</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 11.21-2	High Desert Stormwater Phase II Awareness Impact Project	<p><b>Objective:</b> Educational Outreach Program that implements management measure that prevent or reduce pollution.</p> <p><b>Description:</b> Implementation of a 30 month program to educate about impacts of urban runoff in order to reduce urban runoff. A 30 month program in six cities to demonstrate the potential impacts to water quality from urban runoff. Use of tabletop watershed model, CA Project WET and regional automotive fluids disposal program to demonstrate impacts of urban runoff nonpoint source pollution. Administration of surveys. Distribution of educational materials.</p>	RWQCB-6	San Bernardino, Los Angeles, Kern Counties	evaluation of comprehension and changes in behavior	12/1/02 to 12/1/06
Pre-Implementation 11.44-2	Mammoth Creek TMDL	<p><b>Objective:</b> Watershed restoration through the TMDL program</p> <p><b>Description:</b> Complete and implement the TMDL for Mammoth Creek</p>	RWQCB-6	Mono County	completed TMDL	1/1/05 to 1/1/08
Pre-Implementation 2.203	Assess Occurrences & Sources of Contamination in Castaic Lk	<p><b>Objective:</b> To manage CalFED contract for assessing Occurrences and Sources of E-Coli and EC 0157 Contamination in Castaic Lake.</p> <p><b>Description:</b> Manage the CalFED contract awarded to Metropolitan Water District for a comprehensive microbial monitoring and molecular fingerprinting study, identifying sources of nonpoint source pollution, and implementing best management practices to reduce coliform contamination at its source, and to protect public health in the Lake Castaic watershed.</p>	SWRCB	Los Angeles	Completion of contract tasks	7/1/03 to 6/30/08

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 28.100	Stormwater runoff Phase II unit assessment for applicability	<b>Objective:</b> Determine which park units will be eligible for exemption from this regulation and which are to be managed under this regulation  <b>Description:</b> Determine park units subject to permit and those exempt by definition	DPR	Statewide	Classify all park units as to status with regard to permit required or not	7/30/03 to	7/30/05
Pre-Implementation 4.029-1	TMDL for diazinon in urban creeks	<b>Objective:</b> Develop and implement TMDL  <b>Description:</b> Develop and implement TMDL for diazinon for San Francisco Bay Area urban creeks (35 waterbodies listed)	RWQCB-2	SF Bay Urban Creeks	Completed TMDL, quantifiable pollutant reduction goals	7/1/03 to	3/31/04
Pre-Implementation 4.030	TMDL for diazinon, San Francisco Bay	<b>Objective:</b> Develop and implement TMDL  <b>Description:</b> Develop and implement TMDL for diazinon for San Francisco Bay	RWQCB-2	San Francisco Bay	Completed TMDL, quantifiable pollutant reduction goals	11/5/00 to	6/30/07
Pre-Implementation 4.038-3	Urban Pesticide Committee Support	<b>Objective:</b> To support the Urban Pesticide Committee in coordinating activities of SF Bay Area and Central Valley  <b>Description:</b> Facilitate meetings of Urban Pesticide Committee	RWQCB-2	SF Bay Area and Central Valley	Exchange of information and technical assistance	7/1/03 to	12/31/08
Pre-Implementation 4.041-1	TMDL for Copper and Nickel, SF Bay	<b>Objective:</b> Develop TMDL for copper and nickel in San Francisco Bay north of Dumbarton Bridge  <b>Description:</b> TMDL development	RWQCB-2	San Francisco Bay	Preliminary and final reports, BP amendment	7/1/03 to	12/31/04
Pre-Implementation 4.042-2	TMDL for Chlordane, San Francisco Bay	<b>Objective:</b> Develop TMDL for legacy pesticides (chlordane) in San Francisco Bay  <b>Description:</b> TMDL development, Basin Plan amendment	RWQCB-2	San Francisco Bay	Preliminary and final reports, BP amendment	7/1/04 to	6/30/07

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 4.044-3	TMDL for Siltation, San Francisquito Creek	<b>Objective:</b> Develop and implement TMDL.  <b>Description:</b> Develop and implement TMDL for siltation in San Francisquito Creek	RWQCB-2	San Mateo and Santa Clara Counties	Completed TMDL, quantifiable pollutant reduction goals	7/1/03 to 4/30/06
Pre-Implementation 4.046-2	TMDL for Dissolved Oxygen, TOC, trash, Lake Merritt	<b>Objective:</b> Develop and Implement TMDL  <b>Description:</b> Develop TMDL for Lake Merritt for dissolved oxygen, total organic carbon, and trash	RWQCB-2	Alameda County	Preliminary report	5/1/05 to 6/30/08
Pre-Implementation 4.047-3	TMDL for Mercury, Lake Herman	<b>Objective:</b> Develop and implement TMDL  <b>Description:</b> TMDL development for mercury for Lake Herman	RWQCB-2	Solano County	Completion of TMDL preliminary report	6/30/07 to 6/30/08
Pre-Implementation 4.079-2	Manage contract for copper in brake pads project	<b>Objective:</b> Successful contract management for project to determine the effect of copper brake pads on water quality in San Francisco Bay  <b>Description:</b> This project, the Brake Pad Partnership, will be a modeling and assessment effort to determine the magnitude of the effect of using copper in brake pads on the water quality of San Francisco Bay and other waterbodies.	RWQCB-2	San Francisco Bay	Successful completion of grant objectives	7/1/03 to 12/31/06
Pre-Implementation 4.086-2	TMDL for Mercury, San Francisco Bay	<b>Objective:</b> Develop TMDL for mercury in San Francisco Bay  <b>Description:</b> TMDL for mercury for San Francisco Bay	RWQCB-2	San Francisco Bay	Basin Plan amendment	7/1/03 to 12/31/03
Pre-Implementation 4.094	TMDL for Selenium, San Francisco Bay	<b>Objective:</b> Develop TMDL for selenium in San Francisco Bay  <b>Description:</b> Develop preliminary TMDL	RWQCB-2	San Francisco Bay	Preliminary report	7/1/05 to 6/30/08

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 4.095-1	TMDL for Metals, Suisun Marsh	<p><b>Objective:</b> Develop TMDL for metals in Suisun Marsh</p> <p><b>Description:</b> Develop preliminary and final TMDL, Basin Plan amendment</p>	RWQCB-2	Solano County	Preliminary report, final report, Basin Plan amendment	7/1/04 to	6/30/08
Pre-Implementation 4.096-1	TMDL for Total Dissolved Solids, Suisun Marsh	<p><b>Objective:</b> Develop TMDL for dissolved oxygen in Suisun Marsh</p> <p><b>Description:</b> Develop preliminary and final TMDL, prepare Basin Plan amendment</p>	RWQCB-2	Solano County	Preliminary report, final report, Basin Plan amendment	7/1/04 to	6/30/08
Pre-Implementation 4.097-1	TMDL for Total Organic Carbon, Suisun Marsh	<p><b>Objective:</b> Develop TMDL for total organic carbon in Suisun Marsh</p> <p><b>Description:</b> Develop preliminary and final TMDL, prepare Basin Plan amendment</p>	RWQCB-2	Solano County	Preliminary report, final report, Basin Plan amendment	7/1/04 to	6/30/08
Implement 11.10	Lake Tahoe Water Quality Project at Tahoe Meadows	<p><b>Objective:</b> Reduce sediment and nutrient loading in stormwater runoff from Tahoe Meadows and improve water quality prior to discharge to Lake Tahoe</p> <p><b>Description:</b> Design project to restore drainage channel and meadow; BMP retrofit dirt roads</p>	RWQCB-6	EI Dorado County	implementation of BMPs	12/1/02 to	6/1/04
Implement 11.7	BMP Program For Private Property in Lake Tahoe Basin	<p><b>Objective:</b> Reduce nonpoint source pollution from private properties in the Lake Tahoe Basin</p> <p><b>Description:</b> Facilitate BMP installation through public education, outreach, needs assessment, BMP design, free labor and streamlined permitting</p>	RWQCB-6	EI Dorado and Placer Counties	increased number of properties with installed BMPs	2/1/00 to	4/15/08

**Table IVB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 11.8	Backyard Conservation/BMP Implementation Project	<p><b>Objective:</b> Reduce nonpoint source pollution from private properties in the Lake Tahoe Basin</p> <p><b>Description:</b> Facilitate BMP installation by conducting site evaluations, offering free labor and reduced cost materials, provide public education</p>	RWQCB-6	El Dorado and Placer Counties	increased number of properties retrofitted with BMPs	2/1/02 to	1/31/05
Implement 19.003-1	Resource-Efficient Landscaping	<p><b>Objective:</b> Educate homeowners, professional landscapers, and state agencies on the economic and environmental benefits of utilizing resource-efficient landscaping practices.</p> <p><b>Description:</b> Disseminate information on resource-efficient landscaping practices at landscape industry shows, workshops, and conferences. Provide local jurisdictions and state agencies with education materials.</p>	CIWMB	Statewide	Reductions in green waste generation, water and pesticide usage, and nonpoint source pollution.	7/1/03 to	6/30/08
Implement 19.006-1	North Natomas Landscape Management Outreach Program	<p><b>Objective:</b> Protect water quality in the stormwater detention basins in North Natomas through an educational outreach campaign designed to encourage residents and professional landscapers to adopt resource-efficient landscaping practices.</p> <p><b>Description:</b> Partner with the City of Sacramento to disseminate information to residents and professional landscapers on the use of resource-efficient landscaping practices at community events, homeowner/community association meetings, workshops, local newsletters/ newspapers, etc. in North Natomas. This is intended to: 1. Increase awareness of resource-efficient landscape practices and impact on water quality; 2. Preserve water quality in stormwater detention basins; 3. Reduce pesticide/chemical usage; 4. Reduce green waste generation; 5. Reduce water usage</p>	CIWMB	City of Sacramento, North Natomas	1) Increased awareness; 2) Preservation of water quality in basins; 3) Reduced pesticide use; 4) Reduced green waste; 5) Reduced water use	8/1/01 to	10/1/04



**Table IVB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 2.200	Integrated Pest Management 319(h) Contract	<p><b>Objective:</b> To contract manage the 319(h) project entitled UC Master Gardener IPM and WQ Education and Outreach Program/UC</p> <p><b>Description:</b> Manage the UC Master Gardener IPM and WQ Education and Outreach Program contract. The contract will provide authoritative IPM expertise for the entire State and conduct on-the-ground outreach. Pass along the IPM message, through UC IPM Project training and coordination, to reduce pesticide discharges to surface waters. UCCE county offices without existing Master Gardener Programs will distribute IPM outreach materials.</p>	SWRCB	Statewide	completed contract with deliverables	7/1/03 to 6/30/08
Implement 28.115	Railroad Operations Pollution Prevention	<p><b>Objective:</b> Reduce stormwater impacts at parks with railroad activities.</p> <p><b>Description:</b> Install secondary containment to prevent spill material from impacting water during stormwater runoff</p>	DPR	Train Oriented Park Units	Containment installed under sources of contamination.	7/1/03 to 6/30/08
Implement 28.116	Shooting Range Pollution	<p><b>Objective:</b> Reduce or eliminate impacts of shooting range runoff</p> <p><b>Description:</b> Construct or reconstruct shooting ranges to keep pollutants on site and not contaminate adjacent areas.</p>	DPR	Statewide	Runoff from shooting ranges does not have increased levels of shooting-oriented contaminants kept from runoff	7/1/03 to 6/30/08

**Table IVB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 28.117	Park Operations and Storage	<p><b>Objective:</b> Eliminate potential pollution, permits fees and need for regulatory oversight</p> <p><b>Description:</b> Store materials required to operate park units under cover to eliminate potential pollution of stormwater. Work with source hazardous materials under cover to eliminate potential pollution of stormwater.</p>	DPR	Statewide	Eliminate need for NPDES permit under Stormwater regulations.	7/1/03 to 6/30/08
Implement 28.118	Parking Lot Runoff	<p><b>Objective:</b> Eliminate impacts to water from parking lots.</p> <p><b>Description:</b> Treatment of paved surface runoff to remove pollutants</p>	DPR	Statewide	Eliminate pollution of waters of the state from parking lot operations	7/1/03 to 6/30/08
Implement 4.040-3	Erosion Control Workshops	<p><b>Objective:</b> Reduce impacts of erosion control from new and redevelopment activities</p> <p><b>Description:</b> Conduct 7-10 BMP workshops annually for local agencies and developers.</p>	RWQCB-2	Regionwide RB2	Attendance at workshop and compliance with erosion control BMPs	7/1/03 to 12/31/08
Implement 4.043-3	TMDL for PCBs, San Francisco Bay	<p><b>Objective:</b> Develop and implement TMDL</p> <p><b>Description:</b> Final report and prepare Basin Plan amendment</p>	RWQCB-2	San Francisco Bay	Completed report and amendment	7/1/03 to 3/30/04
Implement 4.049-2	Manage contract for mercury reduction	<p><b>Objective:</b> Oversee grant for mercury reduction projects to reduce erosion of contaminated sediments.</p> <p><b>Description:</b> Mercury reduction demonstration projects, preparation of guidance document</p>	RWQCB-2	Santa Clara County	Completion of projects and guidance document	7/1/03 to 12/31/05

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 4.077-2	Manage contract Urban Stormwater Retrofit Projects	<p><b>Objective:</b> Oversight of grant to implement stormwater BMP retrofit sites</p> <p><b>Description:</b> Implement 2 stormwater retrofit sites with measures such as cisterns, driveway drywells, vegetated swales, permeable pavement, etc. as demonstration projects.</p>	RWQCB-2	Santa Clara County	Implementation of projects	7/1/03 to 12/31/06
Implement 4.082	Manage contract on PCB abatement	<p><b>Objective:</b> Oversee contract to investigate and remediate PCB pollution in known hotspot area in Oakland</p> <p><b>Description:</b> This project will investigate sources of PCBs in storm drains and facilities in the Ettie Street watershed in Oakland, a known PCB hotspot. The project would abate the PCB pollution and set up a methodology for addressing other pollutant hotspots.</p>	RWQCB-2	Alameda County, City of Oakland	Identification and remediation of PCB sources into San Francisco Bay	7/1/03 to 12/31/06
Implement 6.026	Los Angeles River Street-End Biofiltration	<p><b>Objective:</b> To reduce urban runoff pollution from contaminating the LA River and ocean</p> <p><b>Description:</b> Install a biofiltration and trash capture device at the end of a dead-end street adjacent to the LA River northwest of downtown. The asphalt and concrete at the street end will be removed and replaced with the biofiltration (utilizing native vegetation) and trash capture device. Project will implement a specific objective of an existing trash TMDL.</p>	RWQCB-4	Los Angeles County	MP Implementation	7/1/03 to 6/30/08
Implement 6.046	TMDL Implementation for Ballona Creek-Pathogens	<p><b>Objective:</b> MP Implementation and storm water diversion projects</p> <p><b>Description:</b> MP implementation and storm water diversion</p>	RWQCB-4	Ballona Creek	delisting on 303(d) list	2/1/03 to 9/1/14

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 6.047	TMDL Implementation for Los Angeles River-Metals	<b>Objective:</b> BMP implementation and storm water diversions <b>Description:</b> MP implementation and storm water diversion	RWQCB-4	Los Angeles River	Delisting of water body	4/15/03 to	10/1/14
Implement 6.048	TMDL Implementation for Los Angeles River-Pathogens	<b>Objective:</b> BMP Implementation and storm water diversion <b>Description:</b> MP Implementation and storm water diversion	RWQCB-4	Los Angeles River	delisting of water body from 303(d) list	4/15/03 to	10/1/14
Implement 6.049-1	TMDL Implentation for Malibu Creek-Nutrients	<b>Objective:</b> MP implementation <b>Description:</b> Develop TMDL implementation plan and reshedule of implementation	RWQCB-4	Los Angeles County	Delisting on 303 (d) list	7/1/03 to	6/30/08
Implement 6.050	TMDL Implentation for San Gabriel River-Nutrients	<b>Objective:</b> MP implementation <b>Description:</b> Develop TMDL implementation plan and reshedule of implementation	RWQCB-4	Los Angeles County	Delisting on 303 (d) list	7/1/03 to	6/30/08
Implement 6.052-1	TMDL Implentation for Santa Clara River-Chloride	<b>Objective:</b> MP implementation on Santa Clara River <b>Description:</b> Develop TMDL implementation plan and reschedule of implementation	RWQCB-4	Ventura County	Delisting on 303 (d) list	7/1/03 to	6/30/08
Implement 6.054	TMDL Implentation for Los Angeles River-Nitrogen	<b>Objective:</b> MP implementation <b>Description:</b> Develop TMDL implementation plan and reshedule of implementation	RWQCB-4	Los Angeles County	Delisting on 303 (d) list	7/1/03 to	6/30/08

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 6.056	TMDL Implementation for Dominguez Channel-Coliform	<p><b>Objective:</b> MP implementation in Dominguez Channel</p> <p><b>Description:</b> Develop TMDL implementation plan and reschedule of implementation</p>	RWQCB-4	Los Angeles County	Delisting on 303 (d) list	7/1/03 to	6/30/08
Report 34.005	Standards for Beaches and Recreational Bathing Areas	<p><b>Objective:</b> Establish standards for salt water beaches and fresh water recreational bathing areas.</p> <p><b>Description:</b> Establish standards for salt water beaches and fresh water recreational bathing areas. Regulations for salt water beaches have been adopted. Standards for recreational bathing areas are guidance only. DHS oversee contracts with county public health departments for monitoring costs.</p>	DHS	Statewide	Establish standards	7/1/03 to	6/30/08

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 3.4A On-site Disposal Systems - New OSDSs</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 2.205-1	Statewide ODSD Standards Development	<b>Objective:</b> To develop statewide regulations for onsite wastewater treatment systems. <b>Description:</b> Work with stakeholders and other interested parties to develop regulations relative to proper management of OSD systems.	SWRCB	Statewide	Adoption of regulations	7/1/03 to 6/30/08
Pre-Implementation 4.052-1	Onsite Wastewater Treatment System Statewide Standards Dev.	<b>Objective:</b> Participate in statewide task force <b>Description:</b> Develop statewide standards for on-site systems.	RWQCB-2	Statewide	completion of standards development	7/1/03 to 12/31/04
Pre-Implementation 4.053-1	Onsite wastewater treatment systems, revise and update MOUs	<b>Objective:</b> Revise and update waivers and develop MOU's for each local agency program <b>Description:</b> Revise and update waivers and develop MOU's for each local agency program	RWQCB-2	Regionwide	Updated MOUs	7/1/03 to 12/31/08
Pre-Implementation 5.304	Assist on-site disposal policy development	<b>Objective:</b> Development of on-site disposal policy which is protective of water quality <b>Description:</b> Participate in statewide TAC and comment on proposed policy regarding on-site disposal	RWQCB-3	Regionwide RB3	Technically sound water quality protective criteria for on-site disposal systems	7/1/03 to 6/30/08
Pre-Implementation 5.305	Evaluate on-site disposal for compliance with policy	<b>Objective:</b> Assure consistency with Basin Plan criteria for on-site disposal <b>Description:</b> Review development plans for consistency with Basin Plan criteria, through WDR program	RWQCB-3	Regionwide RB3	Consistency with Basin Plan criteria	7/1/03 to 6/30/08

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 19.009-1	Pollution Prevention/Education	<p><b>Objective:</b> To establish and maintain used oil and household hazardous waste (hhw) collection programs in all CA jurisdictions. To increase used oil/hhw recycling rates in CA. To educate the public about oil-related storm water pollution prevention and assist local jurisdictions in implementing measures that mitigate oil in storm water.</p> <p><b>Description:</b> Provide local jurisdictions with Used Oil Block and Local Government Opportunity grants and provide non profits with Non Profit grants to: 1) establish and maintain used oil and household hazardous waste collection facilities/programs throughtout the state; 2) educate public about proper management and disposal of used oil/hhw and the location of used collection facilities/programs; 3) implement measures that mitigate oil in storm water.</p>	CIWMB	Statewide	Facilities and programs established and operating in all jurisdictions.	7/1/03 to 6/30/08
Implement 4.051-2	Manage contract for onsite wastewater treatment systems	<p><b>Objective:</b> Oversee Prop 13 grant for septic system remediation and repairs, develop plan for remediation and completion of upgrades.</p> <p><b>Description:</b> Upgrades of older septic systems, including cluster systems. Performance and ambient water quality monitoring</p>	RWQCB-2	Marin County	Upgrade of systems	7/1/03 to 6/30/06
Report 4.054-1	On site wastewater treatment systems local prgm evaluation	<p><b>Objective:</b> Produce two evaluation reports per year, with findings and recommendations re: adequacy of local oversight programs</p> <p><b>Description:</b> Production of reports with evaluations and recommendations</p>	RWQCB-2	Marin, Sonoma, Solano, Napa, Santa Clara, Contra Costa, Alameda, San Mateo Counties	Completion of evaluations	7/1/03 to 12/31/07

**Table IVB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 3.4B On-site Disposal Systems - Operating OSDs</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 2.205-2	Statewide ODSD Standards Development	<b>Objective:</b> To develop statewide regulations for onsite wastewater treatment systems. <b>Description:</b> Work with stakeholders and other interested parties to develop regulations relative to proper management of OSD systems.	SWRCB	Statewide	Adoption of regulations	7/1/03 to 6/30/08
Pre-Implementation 4.052-2	Onsite Wastewater Treatment System Statewide Standards Dev.	<b>Objective:</b> Participate in statewide task force <b>Description:</b> Develop statewide standards for on-site systems.	RWQCB-2	Statewide	completion of standards development	7/1/03 to 12/31/04
Pre-Implementation 4.053-2	Onsite wastewater treatment systems, revise and update MOUs	<b>Objective:</b> Revise and update waivers and develop MOU's for each local agency program <b>Description:</b> Revise and update waivers and develop MOU's for each local agency program	RWQCB-2	Regionwide	Updated MOUs	7/1/03 to 12/31/08
Implement 4.051-1	Manage contract for onsite wastewater treatment systems	<b>Objective:</b> Oversee Prop 13 grant for septic system remediation and repairs, develop plan for remediation and completion of upgrades. <b>Description:</b> Upgrades of older septic systems, including cluster systems. Performance and ambient water quality monitoring	RWQCB-2	Marin County	Upgrade of systems	7/1/03 to 6/30/06
Implement 6.051	TMDL Implementation for McGrath Beach-Coliform	<b>Objective:</b> MP implementation <b>Description:</b> Develop TMDL implementation plan and reschedule of implementation	RWQCB-4	Ventura County	Delisting on 303 (d) list	7/1/03 to 6/30/08



**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Report 4.054-2	On site wastewater treatment systems local prgm evaluation	<b>Objective:</b> Produce two evaluation reports per year, with findings and recommendations re: adequacy of local oversight programs	RWQCB-2	Marin, Sonoma, Solano, Napa, Santa Clara, Contra Costa, Alameda, San Mateo Counties	Completion of evaluations	7/1/03 to 12/31/07
		<b>Description:</b> Evaluation and recommendations				

**Management Measure: 3.5A Transportation Development - Planning, Siting, and Developing Roads and Highways**

Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Pre-Implementation 11.25-2	Squaw Creek TMDL	<b>Objective:</b> Watershed restoration through the TMDL process <b>Description:</b> Complete and implement the TMDL for Squaw Creek	RWQCB-6	Nevada County	completed TMDL	7/1/03 to 1/1/03

**Management Measure: 3.5B Transportation Development - Bridges**

Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Implement 28.113	Bridge runoff on transportation facilities	<b>Objective:</b> Reduce and eliminate erosion effects from stormwater runoff at transportation bridge facilities <b>Description:</b> Designing and constructing adequate drainage facility to prevent run-on and runoff of eroded materials at bridge sites.	DPR	Statewide	Correct drainage to prevent NPS pollution at bridge sites	7/1/03 to 6/30/08

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 3.5F Transportation Development - Road, Highway, and Bridge Runoff System</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 4.041-2	TMDL for Copper and Nickel, SF Bay	<b>Objective:</b> Develop TMDL for copper and nickel in San Francisco Bay north of Dumbarton Bridge  <b>Description:</b> TMDL development	RWQCB-2	San Francisco Bay	Preliminary and final reports, BP amendment	7/1/03 to 12/31/04
Pre-Implementation 4.095-2	TMDL for Metals, Suisun Marsh	<b>Objective:</b> Develop TMDL for metals in Suisun Marsh  <b>Description:</b> Develop preliminary and final TMDL, Basin Plan amendment	RWQCB-2	Solano County	Preliminary report, final report, Basin Plan amendment	7/1/04 to 6/30/08
Pre-Implementation 4.096-2	TMDL for Total Dissolved Solids, Suisun Marsh	<b>Objective:</b> Develop TMDL for dissolved oxygen in Suisun Marsh  <b>Description:</b> Develop preliminary and final TMDL, prepare Basin Plan amendment	RWQCB-2	Solano County	Preliminary report, final report, Basin Plan amendment	7/1/04 to 6/30/08
Pre-Implementation 4.097-2	TMDL for Total Organic Carbon, Suisun Marsh	<b>Objective:</b> Develop TMDL for total organic carbon in Suisun Marsh  <b>Description:</b> Develop preliminary and final TMDL, prepare Basin Plan amendment	RWQCB-2	Solano County	Preliminary report, final report, Basin Plan amendment	7/1/04 to 6/30/08
Implement 3.004	County and Rural Roads	<b>Objective:</b> To control erosion from County and rural roads.  <b>Description:</b> Complaint inspections and follow-up enforcement, 5 Counties Coho Plan implementation, TMDL program, 319(h) grant program; FishNet 4C.	RWQCB-1	Regionwide RB1	Compliance with Basin Plan prohibitions, and less public complaints	7/1/03 to 6/30/08

**Table IVB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 3.6A Education/Outreach - Pollution Prevention/Education: General Sources</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 20.004	HHW and CESQG Impact Assessment	<b>Objective:</b> Identify impacts of Household Hazardous Waste (HHW) and Conditionally Exempt Small Quantity Generator (CESQG) waste collection programs. <b>Description:</b> Track activities at HHW collection facilities.	DTSC	Statewide	Identification of impacts.	1/1/03 to 6/30/08
Pre-Implementation 20.005	HHW and CESQG Training Assessment	<b>Objective:</b> Determine need for education and training for local Hazardous Household Waste (HHW) and Conditionally Exempt Small Quantity Generator (CESQG) programs. <b>Description:</b> Identify training and education needed.	DTSC	Statewide	Needs assessment completed	1/1/03 to 6/30/08
Pre-Implementation 20.006	HHW Collection Facility Inspection Targeting	<b>Objective:</b> Annually identify Hazardous Household Waste (HHW) Collection Facility inspection workplan components. <b>Description:</b> Develop inspection workplan through regional annual HHW Conferences.	DTSC	Statewide	Development of annual workplan.	1/1/03 to 6/30/08
Pre-Implementation 20.007	HHW Collection Facility Inspection Coordination	<b>Objective:</b> Coordinate inspection workplan with permitting and other DTSC and CUPA actions for Hazardous Household Waste (HHW) Collection facilities. <b>Description:</b> Workplan for HHW inspections is coordinated with other actions.	DTSC	Statewide	Coordinated workplan	1/1/03 to 6/30/08
Pre-Implementation 4.029-2	TMDL for diazinon in urban creeks	<b>Objective:</b> Develop and implement TMDL  <b>Description:</b> Develop and implement TMDL for diazinon for San Francisco Bay Area urban creeks (35 waterbodies listed)	RWQCB-2	SF Bay Urban Creeks	Completed TMDL, quantifiable pollutant reduction goals	7/1/03 to 3/31/04

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 4.046-3	TMDL for Dissolved Oxygen, TOC, trash, Lake Merritt	<p><b>Objective:</b> Develop and Implement TMDL</p> <p><b>Description:</b> Develop TMDL for Lake Merritt for dissolved oxygen, total organic carbon, and trash</p>	RWQCB-2	Alameda County	Preliminary report	5/1/05 to 6/30/08
Pre-Implementation 4.058	Urban Runoff Presentations	<p><b>Objective:</b> Make technical presentations to public and other agencies on urban runoff issues.</p> <p><b>Description:</b> Outreach to agencies and public on BMP implementation</p>	RWQCB-2	Regionwide RB2	Completion of presentations	7/1/03 to 12/31/08
Pre-Implementation 4.079-1	Manage contract for copper in brake pads project	<p><b>Objective:</b> Successful contract management for project to determine the effect of copper brake pads on water quality in San Francisco Bay</p> <p><b>Description:</b> This project, the Brake Pad Partnership, will be a modeling and assessment effort to determine the magnitude of the effect of using copper in brake pads on the water quality of San Francisco Bay and other waterbodies.</p>	RWQCB-2	San Francisco Bay	Successful completion of grant objectives	7/1/03 to 12/31/06
Pre-Implementation 6.073	Res. No. 02-007 List Oxnard City Corps - Storm Drain Keeper	<p><b>Objective:</b> Development of Storm Drain Keeper Program</p> <p><b>Description:</b> Storm Drain Keeper Program</p>	RWQCB-4	Oxnard	Completed program	3/22/02 to 6/30/08

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 11.21-3	High Desert Stormwater Phase II Awareness Impact Project	<p><b>Objective:</b> Educational Outreach Program that implements management measure that prevent or reduce pollution.</p> <p><b>Description:</b> Implementation of a 30 month program to educate about impacts of urban runoff in order to reduce urban runoff. A 30 month program in six cities to demonstrate the potential impacts to water quality from urban runoff. Use of tabletop watershed model, CA Project WET and regional automotive fluids disposal program to demonstrate impacts of urban runoff nonpoint source pollution. Administration of surveys. Distribution of educational materials.</p>	RWQCB-6	San Bernardino, Los Angeles, Kern Counties	evaluation of comprehension and changes in behavior	12/1/02 to 12/1/06
Implement 19.003-2	Resource-Efficient Landscaping	<p><b>Objective:</b> Educate homeowners, professional landscapers, and state agencies on the economic and environmental benefits of utilizing resource-efficient landscaping practices.</p> <p><b>Description:</b> Disseminate information on resource-efficient landscaping practices at landscape industry shows, workshops, and conferences. Provide local jurisdictions and state agencies with education materials.</p>	CIWMB	Statewide	Reductions in green waste generation, water and pesticide usage, and nonpoint source pollution.	7/1/03 to 6/30/08
Implement 19.004	Sustainable Environmental Design & Education Program	<p><b>Objective:</b> Ensure that new buildings and landscape areas are designed to prevent waste and pollution, conserve water and energy, and utilize recycled-content building and landscape products.</p> <p><b>Description:</b> Survey college and university building and landscape architecture programs to determine whether they offer sustainable environmental design curriculum. Based on this survey, develop a model program that can be adopted by universities and industry continuing education programs to teach students and practitioners about core principals pertaining to sustainable environmental design.</p>	CIWMB	Statewide	New buildings and landscapes that incorporate sustainable design elements.	2/1/02 to 12/1/03

**Table IVB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 19.006-2	North Natomas Landscape Management Outreach Program	<p><b>Objective:</b> Protect water quality in the stormwater detention basins in North Natomas through an educational outreach campaign designed to encourage residents and professional landscapers to adopt resource-efficient landscaping practices.</p> <p><b>Description:</b> Partner with the City of Sacramento to disseminate information to residents and professional landscapers on the use of resource-efficient landscaping practices at community events, homeowner/community association meetings, workshops, local newsletters/ newspapers, etc. in North Natomas. This is intended to: 1. Increase awareness of resource-efficient landscape practices and impact on water quality; 2. Preserve water quality in stormwater detention basins; 3. Reduce pesticide/chemical usage; 4. Reduce green waste generation; 5. Reduce water usage</p>	CIWMB	City of Sacramento, North Natomas	1) Increased awareness; 2) Preservation of water quality in basins; 3) Reduced pesticide use; 4) Reduced green waste; 5) Reduced water use	8/1/01 to 10/1/04
Implement 19.009-2	Pollution Prevention/Education	<p><b>Objective:</b> To establish and maintain used oil and household hazardous waste (hhw) collection programs in all CA jurisdictions. To increase used oil/hhw recycling rates in CA. To educate the public about oil-related storm water pollution prevention and assist local jurisdictions in implementing measures that mitigate oil in storm water.</p> <p><b>Description:</b> Provide local jurisdictions with Used Oil Block and Local Government Opportunity grants and provide non profits with Non Profit grants to: 1) establish and maintain used oil and household hazardous waste collection facilities/programs throughout the state; 2) educate public about proper management and disposal of used oil/hhw and the location of used collection facilities/programs; 3) implement measures that mitigate oil in storm water.</p>	CIWMB	Statewide	Facilities and programs established and operating in all jurisdictions.	7/1/03 to 6/30/08

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 2.201	Website Support for Model Urban Runoff Program	<p><b>Objective:</b> To promote the use of NPS management measures related to Urban Runoff by providing regular updates on MURP to the SWRCB website.</p> <p><b>Description:</b> Maintain communications with the California Coastal Commission regarding MURP updates, and routinely post them on the SWRCB website.</p>	SWRCB	Statewide	MURP on the web	7/1/03 to 6/30/08
Implement 2.202	Stormwater Education	<p><b>Objective:</b> To provide education and outreach opportunities that will increase utilization of urban runoff management measures and management practices.</p> <p><b>Description:</b> Develop guidance documents and provide workshops to the public and the regulatory community that will increase awareness of urban runoff management measures and management practices.</p>	SWRCB	Statewide	Completed guidance materials and workshops	7/1/03 to 6/30/08

**Table IVB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 2.204	Erase The Waste	<p><b>Objective:</b> To educate the public about the ill effects of storm water pollution and to encourage behavioral change to help reduce urban runoff into Los Angeles area waterways and the coast.</p> <p><b>Description:</b> The Erase The Waste campaign features advertising, community cleanup projects, corporate-community partnerships and water education curriculum for grades K-12. The SWRCB has identified the LA storm water problem as one of the biggest environmental challenges facing the State, and has emphasized education to reduce the pollution threat. The Water Board Education program has created a comprehensive, two-year, \$5 million public education program to measurably reduce storm water pollution in Los Angeles County. The program is focused on runoff issues that affect public health and the economy. The campaign, which targets plastics pollution, in advertising push to educate the public on the ill effects on polluting, and to promote positive pollution prevention behaviors (including disposing of plastics in proper receptacles, recycling, picking up after pets, etc.). All campaign materials can be viewed at <a href="http://www.erasethewaste.com">www.erasethewaste.com</a>. Once these materials are used in the greater LA area, they will be repackaged for use by other municipalities and school districts under storm water regulation.</p>	SWRCB	Los Angeles Area	All created advertising and outreach tools will be shared with other storm water programs statewide.	8/1/03 to 6/30/05
Implement 20.008	Secondary Containment at Hazardous Waste Facilities	<p><b>Objective:</b> Assure hazardous waste management (HWM) facilities' compliance with secondary containment standards.</p> <p><b>Description:</b> Determine that facilities are in compliance with regulations through inspections.</p>	DTSC	Statewide	Results of inspections	1/1/03 to 6/30/08



**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 20.009	HHW and CESQG Training	<p><b>Objective:</b> Conduct bi-monthly educational workshops for local Hazardous Household Waste (HHW) and Conditionally Exempt Small Quantity Generator (CESQG) program managers</p> <p><b>Description:</b> Conduct 10 workshops annually (5 in northern CA and 5 in southern CA).</p>	DTSC	Statewide	Workshops conducted.	1/1/03 to 6/30/08
Implement 20.010	HHW and CESQG Annual Conference	<p><b>Objective:</b> Conduct annual conference and training for local Hazardous Household Waste (HHW) and Conditionally Exempt Small Quantity Generators (CESQG) program managers.</p> <p><b>Description:</b> Conduct post-conference evaluation.</p>	DTSC	Statewide	Completed conference and evaluations	1/1/03 to 6/30/08
Implement 20.011	Hazardous Waste Generator Education	<p><b>Objective:</b> Continue compliance school for hazardous waste generator education.</p> <p><b>Description:</b> Ongoing participation.</p>	DTSC	Statewide	Participation in training	1/1/03 to 6/30/08
Implement 20.012	Hazardous Waste Generator Industry Assistance	<p><b>Objective:</b> Continue industry assistance efforts via individual contacts and the development of topic specific fact sheets.</p> <p><b>Description:</b> Ongoing communication and development of fact sheets.</p>	DTSC	Statewide	Distribution of fact sheets.	1/1/03 to 6/30/08
Implement 20.013	Hazardous Waste Regulation Implementation	<p><b>Objective:</b> Improve statewide consistency on the implementation of hazardous waste regulations via development of guidance for DTSC staff.</p> <p><b>Description:</b> Ongoing development of guidance.</p>	DTSC	Statewide	Guidance distributed.	1/1/03 to 6/30/08
Implement 20.014	Hazardous Waste Regulation Improvement	<p><b>Objective:</b> Continue improving standards via updating/upgrading hazardous waste regulations.</p> <p><b>Description:</b> Ongoing regulations review and update.</p>	DTSC	Statewide	Up-to-date standards.	1/1/03 to 6/30/08

**Table IVB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 20.015	Hazardous Waste Facility Inspections	<p><b>Objective:</b> Conduct compliance inspections at Hazardous Waste Management facilities.</p> <p><b>Description:</b> Inspections conducted, reports developed, follow-up actions taken.</p>	DTSC	Statewide	Number of inspections conducted.	1/1/03 to 6/30/08
Implement 20.016	HHW/Used Oil Awards	<p><b>Objective:</b> Present awards for outstanding Cal EPA HHW/Used Oil Programs.</p> <p><b>Description:</b> Make annual awards at 10-15/yr.</p>	DTSC	Statewide	Number of nominations.	1/1/03 to 6/30/08
Implement 4.049-3	Manage contract for mercury reduction	<p><b>Objective:</b> Oversee grant for mercury reduction projects to reduce erosion of contaminated sediments.</p> <p><b>Description:</b> Mercury reduction demonstration projects, preparation of guidance document</p>	RWQCB-2	Santa Clara County	Completion of projects and guidance document	7/1/03 to 12/31/05
Implement 4.055	Manage contract for pesticide reduction	<p><b>Objective:</b> Oversee grant program to reduce pesticides in urban areas by working with pesticide distributors to provide less toxic alternatives.</p> <p><b>Description:</b> Work with pesticide distributors to provide less toxic alternatives at point of sale</p>	RWQCB-2	Marin and Sonoma Counties	Reduction in sales of toxic pesticides	7/1/03 to 6/30/06
Implement 4.056	Manage contract on IPM methods	<p><b>Objective:</b> Oversee contract to educate pest control operators in use of IPM methods</p> <p><b>Description:</b> Implements training for pest control operators in integrated pest management (IPM) methods, establishes an IPM certification program, 9-month pilot program.</p>	RWQCB-2	Regionwide	Certification program implemented, training completed	7/1/03 to 6/30/05

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 4.080	Management of contract on student outreach and education	<p><b>Objective:</b> Oversee project for inner city educational program on nonpoint source pollution and habitat protection</p> <p><b>Description:</b> The project, Estuary Action Challenge, will include creek cleanups, student and teacher education, creek-focused projects in the inner city.</p>	RWQCB-2	San Francisco Bay	Educational outreach to students and teachers	7/1/03 to 12/31/05
Implement 6.059	ACL 98-076 City of LA, DPW Hyperion WWC System SEP #8	<p><b>Objective:</b> Conduct a public education outreach program for students within the East Central Interceptor Sewer Corridor</p> <p><b>Description:</b> Public Education Outreach. Regional Board staff will overlook the SEP project to ensure milestones and goals are met through regular reports submitted to RB staff by the SEP Proponent/Manager. Reports will discuss the project's standing and what goals, milestones, problems etc. the project has faced during its implementation.</p>	RWQCB-4	Los Angeles	Completed education program.	7/1/03 to 6/30/08
Track/Monitor 20.017	HHW Outreach	<p><b>Objective:</b> Assess ongoing development of plans, classes, outreach efforts, etc for Hazardous Household Waste (HHW) facilities and events.</p> <p><b>Description:</b> Identification of facility education needs.</p>	DTSC	Statewide	Completed Needs Assessment	1/1/03 to 6/30/08
Track/Monitor 20.018	Hazardous Waste Facility Inspection Tracking	<p><b>Objective:</b> Track completion of inspection activities</p> <p><b>Description:</b> Maintain tracking system.</p>	DTSC	Statewide	Well-maintained tracking system	1/1/03 to 6/30/08
Track/Monitor 20.019	HHW and CESQG Workshop Tracking	<p><b>Objective:</b> Track ongoing outreach efforts of bi-monthly workshops related to Hazardous Household Waste and Conditionally Exempt Small Quantity Generators.</p> <p><b>Description:</b> Ongoing evaluation of attendance and issues raised at workshops.</p>	DTSC	Statewide	ongoing workshop evaluations	1/1/03 to 6/30/08

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: All-U All Urban Measures</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 10.080	Steelhead Creek Drinking Water Quality and Watershed Assess	<p><b>Objective:</b> Assess impacts of urbanization on drinking water quality in Steelhead Creek.</p> <p><b>Description:</b> Rapid urbanization and the resulting land use changes can impair natural watershed functions and increase loading of drinking water parameters of concern. The project will address this problem in the Steelhead Creek (the Natomas East Main Drainage Canal [NEMDC]) watershed and its largest tributary, Dry Creek, using an integrated approach of monitoring flow and water quality, assessing land use change, evaluating upper watershed stressors affecting water quality, and identifying solutions for improvement.</p>	RWQCB-5S	Sacramento River watershed	Completed Assessment	7/1/03 to 6/30/08
Pre-Implementation 11.43	Twin Lakes TMDL	<p><b>Objective:</b> watershed restoration through the TMDL program</p> <p><b>Description:</b> Complete and implement the TMDL</p>	RWQCB-6	Mono County	completed TMDL	1/1/05 to 1/1/08
Pre-Implementation 14.006	Palo Verde Outfall Drain Pathogens TMDL	<p><b>Objective:</b> To develop a Pathogens TMDL for the Palo Verde Outfall Drain (PVOD)</p> <p><b>Description:</b> To develop a TMDL that will include pathogens numeric targets for the PVOD, sources and concentrations of pathogens, and an implementation plan</p>	RWQCB-7	Regionwide RB7	Completion of the TMDL	1/1/02 to 12/31/04

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 14.007	Coachella Valley Stormwater Channel Pathogens TMDL	<p><b>Objective:</b> To develop a Pathogens TMDL for the Coachella Valley Stormwater Channel (CVSC)</p> <p><b>Description:</b> To develop a TMDL that will include pathogens numeric targets for the CVSC, sources and concentrations of pathogens, and an implementation plan</p>	RWQCB-7	Regionwide RB7	Completion of the TMDL	1/10/02 to 12/1/04
Pre-Implementation 14.008	New River Dissolved Oxygen TMDL	<p><b>Objective:</b> To develop a Dissolved Oxygen (DO) TMDL for the New River</p> <p><b>Description:</b> To develop a TMDL that will include DO numeric target for the New River, sources and concentrations of pollutants causing reduction of DO in the New River at the International Boundary, and an implementation plan</p>	RWQCB-7	Regionwide RB7	Completion of the TMDL	1/1/03 to 12/31/04
Pre-Implementation 14.009	New River Trash TMDL	<p><b>Objective:</b> To develop a Trash TMDL for the New River</p> <p><b>Description:</b> To develop a TMDL that will identify sources and quantities of trash to the New River. An implementation plan will also be developed</p>	RWQCB-7	Regionwide RB7	Completion of the TMDL	1/1/03 to 12/31/04
Pre-Implementation 14.010	New River VOCs TMDLs	<p><b>Objective:</b> To develop TMDLs for four types of VOCs for the New River</p> <p><b>Description:</b> These TMDLs will identify sources and concentrations of the VOCs m,p-xylene, o-xylene, p-cymene, and 1,2,4-trimethylbenzene to the New River. Implementation plans will also be developed</p>	RWQCB-7	Regionwide RB7	Completion of the TMDL	1/1/05 to 12/1/09

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 22.001	Local government outreach	<p><b>Objective:</b> Develop and promote MMs and BMPs for local government staff and decision makers to protect water quality</p> <p><b>Description:</b> Sponsor training workshops and provide technical assistance to local governments covered by local coastal plans (LCPs). Develop guidance and outreach materials. Post educational materials on CCC website.</p>	CCC	Entire California coast	Well-informed local governments	7/1/03 to 6/30/08
Pre-Implementation 22.009	Contaminated Sediment Task Force (CSTF)	<p><b>Objective:</b> Incorporate into the CSTF efforts all applicable NPS MMs and BMPs to prevent and control additional contaminated sediment and NPS pollution as a result of remediating the contaminated sediment.</p> <p><b>Description:</b> Continue to develop a strategy with NPS elements to address the issue of contaminated sediment.</p>	CCC	Los Angeles Basin	Completion of the strategy.	7/1/03 to 6/30/05
Pre-Implementation 22.012	Beach Water Quality Task Force (BWQTF)	<p><b>Objective:</b> Develop appropriate MMs and promote agency coordination to reduce beach closures.</p> <p><b>Description:</b> Attend the meetings of BWQTF and its subcommittees. Disseminate information about the NPS program and appropriate MMs and BMPs such as wastewater management for Onsite Treatment Systems, reduction of contaminated runoff from dairies, and capture of trash in stormdrains that can reduce the impact of NPS pollution on beach water quality.</p>	CCC	California coast	Participation in task force. Dissemination of NPS information. Reduction of beach closures.	7/1/03 to 6/30/08
Pre Implementation 6.001	Watershed Management Plan Development for Dominguez Channel	<p><b>Objective:</b> Develop watershed plan and establish a stakeholder group. (01-125-254-0)</p> <p><b>Description:</b> Development of watershed plan and BMP study.</p>	RWQCB-4	Dominguez Channel	Will be finalized at contract approval time	1/1/02 to 1/30/04

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre Implementation 6.002	Machado Lake Assessment Project	<p><b>Objective:</b> The project will study and identify pollution sources into the Machado Lake.</p> <p><b>Description:</b> The study will identify pollution sources through monitoring and watershed investigations. Machado Lake is a polluted freshwater system with limited water circulation and low dissolved oxygen content. Contaminants found in the lake such as trash, pesticides, minerals and nutrients, organics, and heavy metals are potentially carried into the lake by urban runoff.</p>	RWQCB-4	City of Los Angeles	Identification of pollutants	11/1/01 to	1/31/04
Pre-Implementation 6.008	Watershed Mgmt Plan Develop. for S.G. River Above Whittier	<p><b>Objective:</b> Develop watershed plan and establish a stakeholder group. (02-033-254-0)</p> <p><b>Description:</b> Develop a watershed plan through a stakeholder process to identify sustainable practices for improving water quality and reducing nonpoint source pollution. Project includes restoration of critical habitat, identifying BMPs for demonstration, establishing citizen monitoring and stewardship, public education and outreach.</p>	RWQCB-4	Los Angeles County	Watershed plan	1/2/02 to	1/30/04
Pre-Implementation 6.009	Watershed Management Plan Development for Ballona Creek	<p><b>Objective:</b> Develop watershed plan and establish a stakeholder group for Ballona Creek.</p> <p><b>Description:</b> Develop a watershed plan to identify target areas for source control of pollutants, select and prioritize cost-effective BMPs for improving water quality. The project includes developing a community-based monitoring plan and habitat restoration.</p>	RWQCB-4	Los Angeles County	Watershed plan	2/10/02 to	2/28/04

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 6.011	Watershed Management Plan Development for Compton Creek	<p><b>Objective:</b> Development of a watershed plan with a citizen monitoring component. (02-137-254-0)</p> <p><b>Description:</b> Develop a watershed plan through a stakeholder process to address impaired beneficial uses, stormwater retention and removal of pollutants, habitat restoration, access and recreation. A key strategy is the creation of a green corridor in a highly urbanized watershed and restoration of wetland habitat adjacent to the creek channel. The project also seeks to establish a stakeholder steering committee and citizen monitoring group.</p>	RWQCB-4	Los Angeles County	Watershed plan	4/1/02 to 4/30/04
Pre-Implementation 6.012	Watershed Management Plan Development for Rio Hondo River	<p><b>Objective:</b> Development of a watershed plan with a citizen monitoring component.</p> <p><b>Description:</b> Develop a watershed plan through a stakeholder process to address beneficial uses of the Rio Hondo, degradation and needed water quality improvements, habitat restoration, recreational land management and groundwater recharge. The plan will include recommendations for water quality monitoring and data collection.</p>	RWQCB-4	Los Angeles County	Watershed plan	11/15/02 to 1/30/04
Pre-Implementation 6.028	Methodology for Prioritizing Structural BMPs Projects	<p><b>Objective:</b> To develop a comprehensive methodology for prioritizing BMPs implementation that will maximize the return on every dollar expended for structural BMPs.</p> <p><b>Description:</b> Evaluate effectiveness of structural BMPs to aid in implementation of effective TMDLs and management of NPS pollution in general. Develop a comprehensive BMP implementation strategy for the Ballona Creek Watershed which drains into the Santa Monica Bay and has multiple impairments with TMDLs in development.</p>	RWQCB-4	Los Angeles County	Developed methodology	7/1/03 to 6/30/08



**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 6.031	Env Justice Watershed Awareness: Conservation and Pollution	<p><b>Objective:</b> To help local community members use practices that help restore Compton Creek's beneficial uses.</p> <p><b>Description:</b> Support and promote implementation of the LA River trash TMDL, BMPs, wetlands restoration, community-based pollution prevention, and hands-on education activities in the Compton Creek Subwatershed. Conduct environmental audits for residential and commercial activities. Management plan for subwatershed is in development.</p>	RWQCB-4	Los Angeles County	MP implementation	7/1/03 to 6/30/08
Pre-Implementation 6.037	Community-Based Watershed Pollution Prevention Partnership	<p><b>Objective:</b> The project will promote public awareness, local interest and participation in pollution prevention activities through hands-on-education and outreach activities.</p> <p><b>Description:</b> The project consists of developing and implementing a watershed-wide environmental justice and public awareness program that will assist youth, residents and businesses to understand their role in improving water quality, and include the implementation of nonpoint source pollution control strategies through the establishment of pollution prevention partnerships with local community-based organizations among others.</p>	RWQCB-4	Los Angeles County	Increased public awareness	7/1/03 to 6/30/08
Pre-Implementation 6.042	NPS Runoff from large landscape	<p><b>Objective:</b> Develop policy, education and outreach, monitoring and enforcement program with municipalities and environmental agencies</p> <p><b>Description:</b> Develop policy, education and outreach, monitoring and enforcement program with municipalities and environmental agencies regarding residential and large landscape runoff.</p>	RWQCB-4	Los Angeles County	Decrease landscape runoff loading	7/1/03 to 6/30/08

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 16.305	Chollas Creek Diazinon TMDL Development	<p><b>Objective:</b> To develop the Chollas Creek diazinon TMDL.</p> <p><b>Description:</b> To complete the Chollas Creek TMDL, and Basin Plan Amendment, acquire approval of both by RWQCB and SWRCB, as well as USEPA.</p>	RWQCB-9	HU 908	adopted TMDL	7/1/03 to 6/30/08
Pre-Implementation 16.307	Chollas Creek Metals TMDL Development	<p><b>Objective:</b> To develop the Chollas Creek metals TMDL.</p> <p><b>Description:</b> To complete the Chollas Creek TMDL, and Basin Plan Amendment, acquire approval of both by RWQCB and SWRCB, as well as USEPA.</p>	RWQCB-9	HU 908	Adopted TMDL	7/1/03 to 6/30/08
Pre-Implementation 16.309	Chollas Creek Sediment TMDL Development	<p><b>Objective:</b> To develop the Chollas Creek metals TMDL.</p> <p><b>Description:</b> To complete the Chollas Creek TMDL, and Basin Plan Amendment, acquire approval of both by RWQCB and SWRCB, as well as USEPA.</p>	RWQCB-9	HU 908	Adopted TMDL	7/1/03 to 6/30/08
Pre-Implementation 16.311	Mission Bay Bacteria TMDL Development	<p><b>Objective:</b> To develop the Mission Bay Bacteria TMDL.</p> <p><b>Description:</b> To complete the Mission Bay TMDL, and Basin Plan Amendment, acquire approval of both by RWQCB and SWRCB, as well as USEPA.</p>	RWQCB-9	HU 906	Adopted TMDL	7/1/03 to 6/30/08
Pre-Implementation 16.313	San Diego Regionwide Bacteria TMDL Development	<p><b>Objective:</b> To develop TMDL for bacteria-impaired waters of the San Diego region.</p> <p><b>Description:</b> To complete the TMDL, and Basin Plan Amendment, acquire approval of both by RWQCB and SWRCB, as well as USEPA.</p>	RWQCB-9	Regionwide - Region 9	Adopted TMDL	7/1/03 to 6/30/08

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 16.315	Paleta Creek Sediment TMDL Development	<p><b>Objective:</b> To develop the benthic community degradation and sediment toxicity TMDL for Sevent Street Channel (Paleta Creek)</p> <p><b>Description:</b> To complete the TMDL, and Basin Plan Amendment, acquire approval of both by RWQCB and SWRCB, as well as USEPA.</p>	RWQCB-9	HU 908	Adopted TMDL	7/1/03 to 6/30/08
Pre-Implementation 16.317	San Diego Bay Sediment TMDL Development	<p><b>Objective:</b> To develop the TMDL for B Street Broad Piers benthic community degradation and sediment toxicity.</p> <p><b>Description:</b> To complete the TMDL, and Basin Plan Amendment, acquire approval of both by RWQCB and SWRCB, as well as USEPA.</p>	RWQCB-9	HU 908	adopted TMDL	7/1/03 to 6/30/08
Pre-Implementation 16.319	Switzer Creek Sediment TMDL Development	<p><b>Objective:</b> To develop the TMDL for Switzer Creek benthic community degradation and sediment toxicity.</p> <p><b>Description:</b> To complete the TMDL, and Basin Plan Amendment, acquire approval of both by RWQCB and SWRCB, as well as USEPA.</p>	RWQCB-9	HU 908	adopted TMDL	7/1/03 to 6/30/08
Pre-Implementation 16.321	Downtown San Diego Bay Sediment TMDL Development	<p><b>Objective:</b> To develop the TMDL for Downtown Anchorage benthic community degradation and sediment toxicity.</p> <p><b>Description:</b> To complete the TMDL, and Basin Plan Amendment, acquire approval of both by RWQCB and SWRCB, as well as USEPA.</p>	RWQCB-9	HU 908	adopted TMDL	7/1/03 to 6/30/08
Implement 14.004	New River Pathogens TMDL Implementation	<p><b>Objective:</b> To implement the New River Pathogens TMDL</p> <p><b>Description:</b> TMDL implementation activities that include monitoring, site visits, coordination with the USEPA and Mexico, and reporting are ongoing</p>	RWQCB-7	Regionwide RB7	Implementation of the TMDL	1/1/03 to 12/1/14

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 16.306	Chollas Creek Diazinon TMDL Implementation	<b>Objective:</b> To implement the Chollas Creek diazinon TMDL.	RWQCB-9	HU 908	Restoration of beneficial uses and water quality objectives in Chollas Creek.	7/1/03 to 6/30/08
		<b>Description:</b> To perform the coordination and enforcement efforts necessary to implement the TMDL.				
Implement 16.308	Chollas Creek Metals TMDL Implementation	<b>Objective:</b> To implement the Chollas Creek metals TMDL.	RWQCB-9	HU 908	Restoration of beneficial uses and water quality objectives in Chollas Creek.	7/1/03 to 6/30/08
		<b>Description:</b> To perform the coordination and enforcement efforts necessary to implement the TMDL.				
Implement 16.310	Chollas Creek Sediment TMDL Implementation	<b>Objective:</b> To implement the Chollas Creek benthic community degradation and sediment toxicity TMDL.	RWQCB-9	HU 908	Restoration of beneficial uses and water quality objectives in Chollas Creek.	7/1/03 to 6/30/08
		<b>Description:</b> To perform the coordination and enforcement efforts necessary to implement the TMDL.				
Implement 16.312	Mission Bay Bacteria TMDL Implementation	<b>Objective:</b> To implement the Mission Bay Bacteria TMDL.	RWQCB-9	HU 906	Restoration of beneficial uses and water quality objectives in Mission Bay.	7/1/03 to 6/30/08
		<b>Description:</b> To perform the coordination and enforcement efforts necessary to implement the TMDL.				

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 16.314	San Diego Regionwide Bacteria TMDL Implementation	<p><b>Objective:</b> To implement the Bacteria TMDL for San Diego Region waters.</p> <p><b>Description:</b> To perform the coordination and enforcement efforts necessary to implement the TMDL.</p>	RWQCB-9	Regionwide - Region 9	Restoration of beneficial uses and water quality objectives in San Diego Region.	7/1/03 to 6/30/08
Implement 16.316	Paleta Creek Sediment TMDL Implementation	<p><b>Objective:</b> To implement the benthic community degradation and sediment toxicity TMDL for Seventh Street Channel (Paleta Creek)</p> <p><b>Description:</b> To perform the coordination and enforcement efforts necessary to implement the TMDL.</p>	RWQCB-9	HU 908	Restoration of beneficial uses and water quality objectives in Paleta Creek.	7/1/03 to 6/30/08
Implement 16.318	San Diego Bay Sediment TMDL Implementation	<p><b>Objective:</b> To implement the TMDL for B Street Broad Piers benthic community degradation and sediment toxicity.</p> <p><b>Description:</b> To perform the coordination and enforcement efforts necessary to implement the TMDL.</p>	RWQCB-9	HU 908	Restoration of beneficial uses and water quality objectives in San Diego Bay.	7/1/03 to 6/30/08
Implement 16.320	Switzer Creek Sediment TMDL Implementation	<p><b>Objective:</b> To implement the TMDL for Switzer Creek benthic community degradation and sediment toxicity.</p> <p><b>Description:</b> To perform the coordination and enforcement efforts necessary to implement the TMDL.</p>	RWQCB-9	HU 908	Restoration of beneficial uses and water quality objectives in Switzer Creek.	7/1/03 to 6/30/08

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 16.322	Downtown San Diego Bay Sediment TMDL Implementation	<p><b>Objective:</b> To implement the TMDL for Downtown Anchorage benthic community degradation and sediment toxicity.</p> <p><b>Description:</b> To perform the coordination and enforcement efforts necessary to implement the TMDL.</p>	RWQCB-9	HU 908	Restoration of beneficial uses and water quality objectives in San Diego Bay.	7/1/03 to 6/30/08
Implement 22.016	Public Education	<p><b>Objective:</b> Promote public education regarding WQ and NPS pollution with a focus on trash.</p> <p><b>Description:</b> Conduct Coastal Cleanup Days and Kids Cleanup Days annually. Outreach to schools to educate kids about biological diversity, WQ, and NPS pollution.</p>	CCC	coastal counties	Citizen participation in cleanup events. Education of students about pollution.	7/1/03 to 6/30/08
Implement 3.05	NPDES Stormwater Program Efforts	<p><b>Objective:</b> Ensure that stormwater runoff from covered municipalities, construction sites, and industrial facilities comply with all applicable water quality standards.</p> <p><b>Description:</b> Review SWPPPs; inspect facilities; review reports; take enforcement as necessary; provide public outreach; complaint response</p>	RWQCB-1	Regionwide RB1	Basin Plan compliance	7/1/98 to 6/30/08
Implement 6.005	8th Street Low Flow Diversion and Treatment Project	<p><b>Objective:</b> Lower the amount of runoff pollution enter the Los Angeles River (01-181-254-0)</p> <p><b>Description:</b> Construction and operation of a low-flow diversion and treatment system to remove bacteria, oil and other pollutants from runoff entering the Los Angeles River from the 8th street drainage system near downtown</p>	RWQCB-4	City of Los Angeles	Stormwater BMP implementation	1/2/03 to 1/30/04

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 6.013	Infiltration of Urban Runoff Demonstration Program	<p><b>Objective:</b> Implementation of source reduction strategies</p> <p><b>Description:</b> Demonstrate infiltration BMPs to address nonpoint source pollution control and potential re-use of urban runoff to augment groundwater supply. Project involve installation of several BMPs to capture runoff from light, industrial, commercial and residential environments.</p>	RWQCB-4	Los Angeles County	BMP implementation	1/1/02 to	3/30/04
Implement 6.014	Implement & Eval. of BMPs to Improve Coastal Water Quality	<p><b>Objective:</b> Urban BMP effectiveness study</p> <p><b>Description:</b> In joint effort with UCLA the project will effectively monitor various types of BMPs being implemented in urban areas, and measure indicators that are most relevant for judging potential improvement to water quality, toxicity reduction and removal of pesticides and metals. A key product expected from this project will be a matrix describing the effectiveness of various BMPs for trash, sediments, toxicity and selected chemicals.</p>	RWQCB-4	Los Angeles County	BMP effectiveness matrix	1/15/03 to	1/30/04
Implement 6.015	Malibu Creek Watershed Wide Monitoring Plan	<p><b>Objective:</b> Watershed Monitoring</p> <p><b>Description:</b> Implement a two-year watershed-wide monitoring program integrated with other monitoring efforts with participation by multiple stakeholders. Includes both baseline and hot spot monitoring to track sources. Watershed drains into coastal lagoon and beach areas with heavy recreational use. Multiple impairments in watershed and along coast. Several endangered species utilize lagoon.</p>	RWQCB-4	Los Angeles County	MP implementation	7/1/03 to	6/30/08

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 6.023	Three Springs Water Quality Improvements	<p><b>Objective:</b> To progress towards de-listing these water bodies and meeting current and future TMDL requirements.</p> <p><b>Description:</b> Install an in-line storm water filtration device in a storm drain leading to Westlake Lake to control sediment loading and remove urban runoff pollutants. Dry weather and first flush runoff would be captured and treated before release to the lake in the Malibu Creek Watershed which has multiple impairments. Nutrient and coliform TMDLs are in development.</p>	RWQCB-4	Los Angeles County	MP implementation	7/1/03 to 6/30/08
Implement 6.024	Montana Basin Dry-Wet Weather Runoff BMP	<p><b>Objective:</b> To protect the beneficial uses of the Santa Monica Bay through control of NPS pollution found in urban runoff.</p> <p><b>Description:</b> Install two-stage treatment/diversion system in a storm drain to treat dry and wet (up to ¾ inch of a ten year storm) weather runoff from a 600-acre drainage basin which flows to Santa Monica Bay and divert to the sanitary sewer. Removal of pollutants (to varying degrees) contributing to impairment of the Bay would result. TMDLs for these pollutants are in development.</p>	RWQCB-4	Los Angeles County	Implement MPs	7/1/03 to 6/30/08
Implement 6.027	Project Connect: Restoring the Creek-Community Connection in	<p><b>Objective:</b> To reduce urban runoff pollution from contaminating Walnut Creek.</p> <p><b>Description:</b> Demonstration project in the Walnut Creek Subwatershed of the San Gabriel River that will develop and implement BMPs to address urban runoff. Includes outreach, establishment of citizen monitoring program, and evaluation of effectiveness of BMPs. Extensive stakeholder support.</p>	RWQCB-4	Los Angeles County	MP implementation and effectiveness evaluation	7/1/03 to 6/30/08



**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 6.030	Malibu Creek Watershed Urban Runoff Reduction Project	<p><b>Objective:</b> To control urban runoff from irrigation systems at Malibu Creek</p> <p><b>Description:</b> In the Malibu Creek watershed, urban runoff from inefficient irrigation accounts for the majority of NPS pollution entering local streams and creeks, as large housing tracts are adjacent to nearly all the watershed's major tributaries. These flows are the single most polluted source of water in the creek, with elevated levels of nutrients, metals, organics and bacteria, and impact a broader spectrum of natural and recreational resources than they might in more fully-urbanized areas.</p>	RWQCB-4	Los Angeles County	Control of runoff	7/1/03 to 6/30/08
Implement 6.032	San Gabriel Watershed NPS Pollution Reduction Program	<p><b>Objective:</b> To reduce pollution to the San Gabriel Watershed</p> <p><b>Description:</b> Enhance ongoing NPS management efforts in the National Forest areas of the San Gabriel River Watershed that include trash reduction, streambank stabilization, replacement of septic with composting toilets, and outreach. Implements an existing trash TMDL.</p>	RWQCB-4	Los Angeles County	pollution reduction	7/1/03 to 6/30/08
Implement 6.033	Hamilton Bowl Trash Reduction Project	<p><b>Objective:</b> To reduce the amount of trash entering the lower Los Angeles River</p> <p><b>Description:</b> Install in-line and end-of-pipe capture devices to remove trash and debris from runoff flowing from a 2,127-acre area into a detention basin which discharges to the lower Los Angeles River. Implements an existing trash TMDL.</p>	RWQCB-4	Los Angeles County	trash reduction	7/1/03 to 6/30/08

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 6.034	El Rio Sewer System Project	<p><b>Objective:</b> To eliminate groundwater contamination from septic systems.</p> <p><b>Description:</b> Phase-out the use of septic systems in East El Rio which is a major source of NPS pollution and groundwater contamination in this farming area, and construct a lateral main sewer. Implements a Regional Board prohibition on septic systems use in the area.</p>	RWQCB-4	Ventura County	Phased out septic systems	7/1/03 to	6/30/08
Implement 6.043-1	Ventura County Municipal Storm Water NPDES Permit Renewal	<p><b>Objective:</b> Renew the Ventura County Municipal Storm Water NPDES Permit.</p> <p><b>Description:</b> Develop a 2005 Municipal Storm Water NPDES Permit for Ventura County's Principal Co-permittee and the Co-permittees.</p>	RWQCB-4	Ventura County	Adoption of a new Ventura County Municipal Storm Water NPDES Permit.	7/1/03 to	6/1/05
Implement 6.057	ACL 98-076 City of LA, DPW Hyperion WWC System SEP #6	<p><b>Objective:</b> Provide funding for a joint training program to further improve the knowledge base of City and Regional Board staff. Storm water Staff and Ground water staff (\$15,000 each)</p> <p><b>Description:</b> Staff Training. Regional Board staff will overlook the SEP project to ensure milestones and goals are met through regular reports submitted to RB staff by the SEP Proponent/Manager. Reports will discuss the project's standing and what goals, milestones, problems etc. the project has faced during its implementation.</p>	RWQCB-4	Los Angeles	Well-trained Regional Board and City Staffs	7/1/03 to	6/30/08
Implement 6.064	TMDL Implementation Calleguas Creek-Nitrogen	<p><b>Objective:</b> BMP Implementation for Calleguas Creek</p> <p><b>Description:</b> Develop TMDL implementation plan and reschedule of implementation</p>	RWQCB-4	Ventura County	Delisting of 303(d) list	7/1/03 to	6/30/08

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Track/Monitor 11.22	Lake Tahoe BMP Effectiveness&Stormwater Monitoring Study	<p><b>Objective:</b> Assess the ability of existing BMPs to remove fine sediment and nutrients from urban runoff</p> <p><b>Description:</b> Evaluate the cost effectiveness and other attributes of project level and basinwide BMP implementation</p>	RWQCB-6	El Dorado, Nevada, Placer Counties	final report with conclusions and recommendations	3/16/02 to 3/15/05
Track/Monitor 18.007	Chollas Creek OP Monitoring	<p><b>Objective:</b> Chemical &amp; bioassay monitoring at Chollas Creek</p> <p><b>Description:</b> Chemical &amp; bioassay monitoring at Chollas Creek</p>	CDPR	Chollas Creek	Study completed	7/1/03 to 6/30/08
Track/Monitor 6.006	Upper LA River Urban Runoff Pollution Removal Project	<p><b>Objective:</b> BMP Implementation in industrial, commercial and residential settings. (02-027-254-0)</p> <p><b>Description:</b> Modern urbanization and land development decrease the are of impervious surfaces within the watershed of the Los Angeles River. There are a number of pollutants that are associated with different land use activities; they include trash, oil, grease, heavy metals and other contaminates. The beneficial uses of the local waterbodies are also impaired due to excessive amount of trash and pathogenic pollutants. Therefore it is essential to intercept and capture urban runoff pollutants through the appropriate use of structural BMP's in order to preserve and restore the quality of these local waterbodies.</p>	RWQCB-4	City of Los Angeles	BMP implementation; pollution reduction	1/1/02 to 1/30/04

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Track/Monitor 6.007	Implementation of Coliform TMDL for Santa Monica Bay Beaches	<p><b>Objective:</b> Reduce fecal contamination to the Santa Monica beaches.</p> <p><b>Description:</b> Evaluate and characterize sources of fecal contamination to support successful implementation of coliform TMDL for Santa Monica beaches. Project will utilize bacteriological methods and rapid indicator detection technologies to identify sources and mitigation measures.</p>	RWQCB-4	Los Angeles County	reduction in fecal contamination	1/1/02 to	1/30/04
Track/Monitor 6.020	Assessing & Reducing Sources of Plastics/Trash in Urban/Coas	<p><b>Objective:</b> Stormwater-Education &amp; BMP implementation</p> <p><b>Description:</b> Identify sources of plastics and trash (with a concentration on plastic pellets and absorbed toxics) on the Los Angeles and San Gabriel Rivers. Develop and implement BMPs and test their effectiveness in reducing plastic pollutants. Intent is to concentrate on size of plastics which most impact marine life.</p>	RWQCB-4	Los Angeles County	Source identification; BMP implementation	7/1/03 to	6/30/08
Track/Monitor 6.021	Little Dalton Cyn Env. Discovery Ctr and Equestrian Facility	<p><b>Objective:</b> Demonstrate the use of MPs to reduce NPS pollution from equestrian and urban land uses in a subwatershed of the San Gabriel River, Walnut Creek, which has impaired water quality.</p> <p><b>Description:</b> Demonstrate the use of BMPs (e.g., bioswales and constructed wetlands) to reduce NPS pollution from equestrian and urban land uses in a subwatershed of the San Gabriel River, Walnut Creek, which has impaired water quality. Provide data and information for nutrient TMDL development and implementation. Runoff from corralled animal facilities a major problem in Region. A pilot project for the subwatershed plan in development. Excellent stakeholder support.</p>	RWQCB-4	Los Angeles County	Implemented BMPs	7/1/03 to	6/30/08

**Table IVB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

---

Report 6.066	ACL 00-171 County of Los Angeles Sanitation Districts SEP	<p><b>Objective:</b>            Characterize dry weather flow and quality from storm drains in coastal and other water recreation areas within the District's service area</p> <p><b>Description:</b>            Dry Weather Characterization Study. Regional Board staff will overlook the SEP project to ensure milestones and goals are met through regular reports submitted to RB staff by the SEP Proponent/Manager. Reports will discuss the project's standing and what goals, milestones, problems etc. the project has faced during its implementation.</p>	RWQCB-4	Los Angeles County	Completed Study	4/1/02 to 6/30/08
-----------------	---	---	---------	--------------------	-----------------	-------------------

**Table IIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Track/Monitor 25.002-1	Inspection and Enforcement of Forest Practice Rules and THPs	<p><b>Objective:</b> Field inspection and enforcement of Forest Practice Rules and Timber Harvest Plan measures designed to prevent or mitigate impacts of timber harvest on water quality and aquatic habitat.</p> <p><b>Description:</b> Active Timber Harvest Plans receive regular field inspections during operations, at completion and during the post-completion, erosion control maintenance period. Corrective action and enforcement used as necessary to gain compliance and abate potential THP-related sources of water pollution.</p>	CDF	Statewide	Compliance with FPRs and implementation of THP mitigations.	7/1/03 to	6/30/08
---------------------------	--	--	-----	-----------	---	-----------	---------

**SECTION V**  
**MARINAS AND RECREATIONAL BOATING CATEGORY**  
**FIVE-YEAR IMPLEMENTATION PLAN**  
**July 2003 through June 2008**

**A. MARINAS CATEGORY MMs AND ISSUES OF CONCERN**

The SWRCB, CCC, and other State agencies have identified 16 MMs to address Marina and Recreational Boating Category (Marinas) sources of nonpoint pollution, as listed in Table VA, below and further described in Appendix II of this document.

**Table VA**  
**MARINAS CATEGORY MMs**

<b>MM#</b>	<b>Marinas MM Title</b>
<b>4.1</b>	<b>Assessment, Siting and Design</b>
A.	Marina Flushing
B.	Habitat Assessment
C.	Water Quality Assessment
D.	Shoreline Stabilization
E.	Storm Water runoff
F.	Fueling Station Design
G.	Sewage Facilities
H.	Waste Management Facilities
<b>4.2</b>	<b>Operation and Maintenance</b>
A.	Solid Waste Control
B.	Fish Waste Control
C.	Liquid Material Control
D.	Petroleum Control
E.	Boat Cleaning and Maintenance
F.	Maintenance of Sewage Facilities
G.	Boat Operation
<b>4.3</b>	<b>Education and Outreach</b>
A.	Public Education

Because marinas are located at the water's edge, pollutants generated from marinas and boats are less likely to be buffered or filtered by natural processes. When boating and related activities (e.g., marinas and boat maintenance areas) are poorly planned or managed, they may threaten the health of aquatic systems and pose other environmental hazards. The USEPA (1993) identifies several sources of pollution associated with marinas and boating activities. These sources include poorly flushed waterways, pollutants discharged from boats (recreational boats, commercial boats, and "live-aboards"), pollutants carried in stormwater runoff, physical alteration of wetlands and of shellfish/ other benthic communities during construction of marinas, ramps, and related facilities, and pollutants generated from boat maintenance activities on land and in the water.

Effective implementation of the 16 MMs can avoid impacts associated with siting marinas and boat maintenance areas, ensure the best available design and construction practices as well as appropriate operation and maintenance practices and encourage the development and use of effective pollution control and education efforts. The Marina's MMs cover the following operations and facilities:

- Any facility that contains 10 or more slips, piers where 10 or more boats may tie up, or any facility where a boat for hire is docked;
- Any residential or planned community marina with 10 or more slips;
- Any mooring field where 10 or more boats are moored;
- Public or commercial boat ramps; and
- Boat maintenance or repair yards that are adjacent to the water and any Federal, State or local facility that involves recreational boat maintenance or repair on or adjacent to the water (Typically, boat yards are separate entities from marinas and are regulated under NPDES Stormwater regulations and permits to control point sources of pollution).

## **B. RELATION TO OTHER STATE, FEDERAL AND LOCAL PROGRAMS:**

### **1. Commercial and Military Ports**

Commercial and military ports are not targeted in this Program Plan because they are subject to the storm water NPDES permits regulating industrial and construction activities. Commercial ports are also required to submit a port master plan (PMP) for certification by the CCC. The PMP must include the conditions contained in Coastal Act section 30711. An NPS-condition is "an estimate of the effect of development on habitat areas and the marine environment, a review of existing water quality, habitat areas, and quantitative and qualitative biological inventories, and proposals to minimize and mitigate any substantial adverse impact." Section 30711 further states "each city, county, or city and county which has a port within its jurisdiction shall incorporate the certified PMP in its Local Coastal Program (LCP)." In addition, activities in military ports are subject to federal consistency review by the CCC, affording the State an opportunity to ensure that appropriate NPS pollution prevention and control measures are in place. Ports located in the San Francisco Bay are under the jurisdiction of SF Bay Conservation and Development Commission (SFBCDC) and subject to regulations of the MacAteer-Petris Act (MPA).

### **2. Impaired 303(d) Lists and TMDLs**

Under Section 303(d) of the Clean Water Act, California is required to compile a list of impaired waters that fail to meet applicable water quality standards or that cannot support their designated beneficial uses. This list, called a '303(d)' list is submitted to Congress every two years, and California is required to develop a Total Maximum Daily Load (TMDL) for each pollutant causing impairment to the water bodies that are listed. Over the next five-year period, California is planning to expend significant funds and efforts to develop and implement the TMDLs for these identified water bodies. This process will include TMDL implementation plans that will utilize the MMs identified in California's NPS Program Plan.

### **3. Watershed Management Initiative (WMI)**

Marinas, by nature of their business, are positioned in a *water body*, where the activities of others in the watershed affect water quality in the marina basin. In addition, water quality at any



specific point along a river is influenced by all upstream and upgradient locations in the river's watershed. Marinas located on rivers and reservoirs are potential recipients of the runoff from sources located upstream and along upstream tributaries and from all upgradient land-based activities in the watershed. Lakes are the natural sinks for runoff from activities in their basins, and the water quality in marinas on lakes is potentially influenced by all of the activities in the watershed and activities that occur on the lake. The water quality of marinas in estuaries and coastal waters is similarly influenced by the numerous activities that contribute runoff and pollutants to the water flowing into the marina basin. The runoff from marinas in urban settings is often mixed with runoff from nearby areas because runoff is directed toward the surface waters where marinas are located. Similarly, marinas in watersheds where agriculture is abundant may receive runoff from upland agricultural sources. Marinas can benefit from cooperative environmental protection efforts that involve and educate those who potentially contribute pollution to the surface waters in the watershed where the marina is located and seek responsible, shared solutions to water quality problems. The SWRCB WMI is a program that coordinates these solutions within the SWRCB and the RWQCBs.

#### **4. Oil Pollution Act and Regulations**

The Federal Oil Pollution Act (OPA) is a comprehensive prevention, response, liability, and compensation regime for dealing with vessel- and facility-generated discharges of oil or hazardous substances. Under the OPA, any hazardous waste spill from a vessel must be reported by the owner of the vessel and vessel owners are responsible for any costs of a resulting environmental cleanup and any damage claims that might result from the spill. Marinas are responsible for any oil contamination resulting from their facilities, including dumping or spilling of oil or oil-based paint and the use of chemically treated agents.

The Department of Fish and Game's Office of Spill Prevention and Response (OSPR) enforces the laws designed to prevent spills, dispatches units to respond to spills, and investigates spills. OSPR maintains a 24-hour Communications Center headquartered in Sacramento. The Center has the responsibility of dispatching wardens to marine oil spills. Anyone seeing an oil spill or slick is required by law to report the sighting. Reports may be made by telephone to either the Governor's Office of Emergency Services at 1-800-OILS-911, or to OSPR at 1-888-334-2258.

In addition, to assist Small Craft Refueling Dock (a waterside operation, serving primarily small craft of less than 20 meters in length and less than five tons net weight) operators in their spill prevention and response efforts, OSPR conducts voluntary inspections to identify strengths and weaknesses in a system, and – when appropriate – show a dock operator ways to improve his/her ability to prevent and respond to spills. For more information on OSPR's outreach program go to <http://www.dfg.ca.gov/ospr>.

#### **5. Clean Vessel Act Pumpout Grant Program**

In 1992, Congress passed the Clean Vessel Act (CVA) to help reduce pollution from vessel sewage discharges into U.S. waters. The Grant Program established by the Act helps fund the construction, renovation, operation, and maintenance of pumpout and dump stations to service pleasure craft. The Grant Program is authorized through 2007. As part of its commitment to provide clean, safe, and enjoyable recreational boating in California, the Department of Boating and Waterways is serving as the State Grant coordinator. The Department also provides boater education programs to promote public awareness about boat sewage and its proper disposal. The Grant Program benefits boaters, who will have more numerous and convenient pumpout facilities to use as a result of the program, and the public and environment as a whole through reductions

of disease-carrying microorganisms contained in sewage discharges and improvement in dissolved oxygen concentrations.

## **6. California Clean Boating Network**

The California Clean Boating Network (established by the California Coastal Commission in 1995) consists of a collaboration of government, environmental, business, boating, and academic organizations working to increase and improve clean boating education efforts in California. There are three chapters of the CCBN, one in Northern California, one in the Central Coast, and one in the Los Angeles region. Each of these chapters meets quarterly. Through the exchange of information and consideration of new trends in clean boating practices, CCBN members increase their ability to educate the boating public about clean boating practices. Members of the CCBN believe that educating boaters about the impacts of boating and about environmentally sound boating techniques can significantly reduce the contribution of pollution from boating to California's waterways. The CCBN maintains a website for clean boating information at [www.coastal.ca.gov/ccbn.cbndx.html](http://www.coastal.ca.gov/ccbn.cbndx.html) and produces a quarterly newsletter about clean boating and clean marinas in California entitled "The Changing Tide".

## **7. Boating Clean and Green Campaign**

The Boating Clean and Green Campaign is an education and outreach program that promotes environmentally sound boating practices to marine business and boaters in California. Most of the funding for the campaign is provided by the CIWMB's Used Oil Program. Started in April 1997, the Campaign conducts clean boating and clean marinas education throughout the state in partnership with many public and private agencies that share a concern about educating boaters about environmentally sound boating practices.

## **C. OBJECTIVES AND ACTIVITY SUMMARY**

The Marinas Category Objectives and agency activities are provided below. Also, please refer to Appendix III for additional clarification of the objectives established for this category.

### **1. Marinas Category Objectives**

The State of California recently undertook a concerted, collaborative process for the development of Category Objectives for the NPS Implementation Plan 2003-2008. Over a period of approximately one year, the Statewide Interagency Coordinating Committee (IACC) and the Marinas and Recreational Boating Workgroup (a subcommittee of the IACC) met frequently to (1) consider the mission of each agency relative to nonpoint source pollution as it relates to marinas and recreational boating; (2) formulate a means of collaboration; and, (3) set overall objectives for the collaborative process. The result of this effort, which will formulate the focus of California relative to Marina and Recreational Boating nonpoint source pollution prevention, are the Marina and Recreational Boating Category Objectives, which are listed below. These Objectives will serve to guide and measure the progress that will be made over the next five years.

- a. Assess implementation and effectiveness of existing standards and develop and enforce standards that will decrease marina and recreational boating's contribution to nonpoint source pollution.

- b. Develop educational programs, training workshops and other outreach services to increase marinas and recreational boater's pollution prevention efforts.
- c. Develop systems to reward marinas for pro-active environmental-friendly activities.
- d. Assess existing environmental services and expand environmental services at marinas that are supportive of clean boating practices.
- e. Develop information on the overall effectiveness of MP implementation on improving water quality.
- f. Continue to improve upon and expand existing interagency coordination to more effectively manage pollution from recreational boaters and marinas.
- g. Continue to assess waterbodies, identify sources of NPS impacts from recreational boaters and marinas and increase inspections.
- h. Develop and implement watershed-based plans, including TMDLs in order to identify and address impacts from recreational boaters and marinas.
- i. Continue educating marina owners and operators about the programs and funds that are available to help them comply with local, state, and federal regulations.

## **2. Activity Summary for California**

The activities listed in Table VB address all of the Marinas MMs. The primary focus of the listed activities is to prevent discharges of waste oil, sewage, petroleum, solid waste and hazardous substances into State waters, either from surface runoff, improper boat cleaning/maintenance activities, lack of disposal facilities or improper maintenance of existing facilities at marinas. In addition, implementing agencies will rely on education and outreach efforts to marina owners and operators and the boating public to provide information on NPS pollution problems and management practices that can be implemented to prevent or control improper disposal of pollutants into State waters.

**Table VB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

**Marinas**

**Management Measure: 4.1C Assessment, Siting, and Design - Water Quality Assessment**

Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Pre-Implementation 15.003-2	Assess effectiveness of current vessel sewage waste programs	<p><b>Objective:</b> Public awareness; Coastkeeper outreach; updated facilities.</p> <p><b>Description:</b> Assess effectiveness of current vessel sewage waste programs in selected regions in Lower Newport Bay through public awareness; Coastkeeper outreach; updated facilities. Requirement of the Newport Bay Fecal Coliform TMDL</p>	RWQCB-8	Lower Newport Bay	Lower bacteria inputs from vessels, pumpout stations, and marinas is the ultimate goal.	7/1/03 to 6/30/08
Pre-Implementation 4.059-1	Marina Technical Advisory Committee Participation	<p><b>Objective:</b> To participate on a technical advisory committee for a marina sampling program.</p> <p><b>Description:</b> Design and implement marina water quality sampling program under BCDC grant program</p>	RWQCB-2	San Francisco Bay	Development and implementation of monitoring program	7/1/03 to 6/30/06
Pre-Implementation 4.060	Marinas and Boating Workgroup Participation	<p><b>Objective:</b> To participate in a boating and marina workgroup, attend the meetings and give input.</p> <p><b>Description:</b> Attend meetings on implementing nonpoint source activities in San Francisco Bay related to marinas and recreational boating</p>	RWQCB-2	San Francisco Bay	Development of working relationships and recommendations for nonpoint source activities	7/1/03 to 6/30/06

**Table VB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 6.072	Res. No. 02-007 SEP List City of San Buenaventura	<p><b>Objective:</b> This study will identify a means to improve coastal water quality presently affecting popular swimming beaches in the City of Ventura.</p> <p><b>Description:</b> Coastal Water Quality Improvement Study: The purpose of this study is to find an effective solution to improve coastal water quality and to prepare preliminary design plans for implementing the solution.</p>	RWQCB-4	San Buenaventura	Completed preliminary design and plans.	9/23/02 to	9/23/03
Pre-Implementation 5.401	Assist dredge project evaluation for impacts	<p><b>Objective:</b> Prevent water quality impacts associated with dredge activities</p> <p><b>Description:</b> Review and comment on proposed dredge activities, activities performed through Regional Board's 401 Water Quality Certification program.</p>	RWQCB-3	Regionwide RB3	Adequately conditioned dredge projects	7/1/03 to	6/30/08
Implement 2.312-1	Water Quality Indicator Test	<p><b>Objective:</b> Develop a rapid water quality indicator test as an indicator of public health risk.</p> <p><b>Description:</b> Pursue a rapid water quality analytical test (i.e., less than 8 hours) for measurement of indicator bacteria for human pathogens.</p>	SWRCB	Statewide	Development of a less than 8 hour test that is easy to conduct and of comparable cost to current tests.	8/30/02 to	7/31/03
Track/Monitor 4.061-1	Marina and Houseboat Areas Sampling	<p><b>Objective:</b> Insure compliance with vessel waste no-discharge zone in Richardson Bay</p> <p><b>Description:</b> Conduct annual monitoring for coliform in marinas and houseboat areas along Richardson Bay</p>	RWQCB-2	Marin County	Compliance with water quality objectives for coliform	7/1/03 to	12/31/08

**Table VB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

---

Track/Monitor 4.062-3	Manage contract for Green Marinas program	<p><b>Objective:</b> To oversee contract for Green Marinas project to sample and assess marinas for pollution grant.</p> <p><b>Description:</b> Grant project to develop voluntary performance standards, educate boaters, do water quality monitoring, and to determine pollutant sources (marina vs. stormwater runoff).</p>	RWQCB-2	San Francisco Bay	Development of performance standards, completion of water quality monitoring	7/1/03 to 6/30/05
--------------------------	--	--	---------	----------------------	--	-------------------

**Table VB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 4.1E Assessment, Siting, and Design - Storm Water Runoff</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Implement 19.010-2	Marinas and Recreational Boating	<p><b>Objective:</b> To establish and maintain used oil/household hazardous waste collection facilities at marinas and educate boaters about the proper management and disposal of used oil/household hazardous waste they generate.</p> <p><b>Description:</b> Provide grant funds to local jurisdictions and nonprofits to establish used oil/hhw collection facilities at marinas. Provide funds to the California Coastal Commission to manage the Clean and Green Boater Education Campaign and map the location of all marina used oil/hhw collection facilities throughout the state.</p>	CIWMB	Statewide	Number of used oil/hhw collection facilities established at marinas	1/1/03 to 6/30/08
Implement 6.043-2	TMDL Implementation for Marina del Rey-Pathogens	<p><b>Objective:</b> BMP implementation</p> <p><b>Description:</b> MP Implementation</p>	RWQCB-4	Marina del Rey	Delisting from 303 (d) list	4/1/03 to 8/8/13
Implement 6.045	TMDL Implementation for Marina del Rey-Toxics	<p><b>Objective:</b> MP Implementation</p> <p><b>Description:</b></p>	RWQCB-4	Marina del Rey	Delisting on 303 (d) list	4/15/03 to 12/4/13

**Table VB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Track/Monitor 6.017	Effects of Marine/Estuarine Hydrodynamics on Pollutant Transport	<p><b>Objective:</b>  The projects specific goal is to develop a hydrodynamic model that can be used to accurately track pollutant transport through the estuarine and marine portions of the Dominguez Channel.</p> <p><b>Description:</b>  Develop a hydrodynamic model to track pollutant transport through estuarine and marine portions of Dominguez Watershed in support of setting pollutant loading allocations in TMDLs. A large portion of the money goes to field work to investigate currents and flushing. A highly impaired watershed but utilized by endangered species. Large stakeholder group giving support.</p>	RWQCB-4	Los Angeles County	Hydrodynamic Model Development.	7/1/03 to	6/30/08
------------------------	--	---	---------	-----------------------	------------------------------------	-----------	---------



**Table VB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 4.1F Assessment, Siting, and Design - Fueling Station Design</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Implement 2.308	Consider adopting regulations in response to any new legislation	<p><b>Objective:</b> Prevent petroleum releases from marina fueling systems</p> <p><b>Description:</b> In response to any new legislation, develop and adopt regulations specific to marina fueling operations. Consider requiring underground and aboveground storage tank marina fueling systems to be constructed in accordance with soon to be published Underwriters Laboratories Standards.</p>	SWRCB	Statewide	Underwriters Laboratories Standards are adopted in response to any new legislation.	10/1/03 to 1/1/06
Implement 2.309	Develop Technical and Program Guidance	<p><b>Objective:</b> Prevent petroleum releases from marina fueling systems</p> <p><b>Description:</b> Develop technical and program guidance for local agency and Regional Board inspectors to consistently implement the Underwriters Laboratories standards and marina fueling system operation requirements.</p>	SWRCB	Statewide	Local Agency and Regional Board inspectors consistently implement standards and inspection requirements	1/1/05 to 1/1/06
Implement 2.310	Provide statewide training and inspection assistance	<p><b>Objective:</b> Ensure consistent statewide compliance with fueling system regulations.</p> <p><b>Description:</b> Develop and provide statewide training and inspection assistance to local agency and Regional Board staff.</p>	SWRCB	Statewide	Local agency and Regional Board staff receive training and inspection assistance.	1/1/06 to 1/1/08

**Table VB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 4.1G Assessment, Siting, and Design - Sewage Facilities</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 15.003-1	Assess effectiveness of current vessel sewage waste programs	<p><b>Objective:</b> Public awareness; Coastkeeper outreach; updated facilities.</p> <p><b>Description:</b> Assess effectiveness of current vessel sewage waste programs in selected regions in Lower Newport Bay through public awareness; Coastkeeper outreach; updated facilities. Requirement of the Newport Bay Fecal Coliform TMDL.</p>	RWQCB-8	Lower Newport Bay	Lower bacteria inputs from vessels, pumpout stations, and marinas is the ultimate goal.	7/1/03 to 6/30/08
Pre-Implementation 2.300	Establish regional standards for number of sewage facilities	<p><b>Objective:</b> Reduce disposal of raw sewage into coastal and inland waters from recreational boats.</p> <p><b>Description:</b> Establish regional standards for the minimum number of sewage facilities (e.g., fixed, mobile, and/or floating pump outs, dump stations, and restrooms) per recreational vessel in the Los Angeles Region's Bays and Harbors</p>	SWRCB	Regionwide RB4	Completion of Assessment Report and Recommendations	5/15/03 to 3/31/05
Pre-Implementation 2.301	Establish regional standards for sewage disposal facilities.	<p><b>Objective:</b> Reduce disposal of raw sewage into coastal and inland waters from recreational boats.</p> <p><b>Description:</b> Establish regional standards for minimum number of sewage facilities (e.g., fixed, mobile, and/or floating pump outs, dump stations, and restrooms) per recreational vessel in RWQCB 8.</p>	SWRCB	Newport and Huntington Bays	Completion of Assessment Report and Recommendations	3/31/03 to 6/30/04

**Table VB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 2.302	Establish regional standards for sewage disposal facilities.	<p><b>Objective:</b> Reduce disposal of raw sewage into coastal and inland waters from recreational boats.</p> <p><b>Description:</b> Establish regional standards for minimum number of sewage facilities (e.g., fixed, mobile, and/or floating pump outs, dump stations, and restrooms) per recreational vessel in RWQCB 2.</p>	SWRCB	Tomales, San Francisco and Richardson Bays	Completion of Assessment Report and Recommendations	5/15/03 to 3/31/05
Pre-Implementation 2.316-1	Identify marinas in water bodies on CWA 303(d) list/bacteria	<p><b>Objective:</b> Identify water bodies potentially affected by sewage waste discharges at marinas</p> <p><b>Description:</b> Identify water bodies on CWA Section 303(d) list that are listed for bacteria (or other indicators related to vessel sewage) and that are potentially affected by discharges at marinas.</p>	SWRCB	Statewide	Identification of marinas affected by sewage waste discharges.	7/1/03 to 6/30/08
Pre-Implementation 32.002-1	Identify potential funding for pumpout installation	<p><b>Objective:</b> Department will continue to participate in federal Clean Vessel Act program.</p> <p><b>Description:</b> Identify future sources of funding for the installation of pumpout facilities.</p>	DBW	Statewide	Identification of funding sources	7/1/03 to 6/30/08
Pre-Implementation 4.064	Marina Minimum Standards for Sewage Facilities	<p><b>Objective:</b> Establish minimum standards defining adequate number of pumpouts, dump stations or restroom facilities.</p> <p><b>Description:</b> Establish standards, work with State Board and DBW on determining boating sewerage needs in Tomales Bay and San Francisco Bay.</p>	RWQCB-2	San Francisco Bay Region	Developed standards, identification of pumpout locations	7/1/03 to 6/30/05

**Table VB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 4.065-1	Tomales Bay sewage planning	<p><b>Objective:</b> Provide input and recommendations on sewage facilities for Tomales Bay</p> <p><b>Description:</b> Work with National Park Service, State Parks, and County Open Space through Tomales Bay Shellfish Technical Advisory Committee to provide input and recommendations on sewage facilities for Tomales Bay</p>	RWQCB-2	Marin County	Determination of need and location for sewage facilities	7/1/03 to	6/30/05
Pre-Implementation 4.066-1	Tomales Bay Evaluation of Need for No-Discharge Zone	<p><b>Objective:</b> To determine the need for a "no-discharge zone" in Tomales Bay.</p> <p><b>Description:</b> Evaluate the need and requirements for establishing a vessel waste no-discharge zone in Tomales Bay</p>	RWQCB-2	Marin County	Determination of need and requirements	7/1/03 to	6/30/05
Pre-Implementation 4.093-2	TMDL for Pathogens, Richardson Bay	<p><b>Objective:</b> Develop TMDL for pathogens in Richardson Bay</p> <p><b>Description:</b> Develop TMDL for pathogens from marinas, boating, urban runoff in Richardson Bay. Richardson Bay is a designated no-discharge zone by EPA</p>	RWQCB-2	San Francisco Bay	Reports and Basin Plan amendment	7/1/04 to	6/30/08
Pre-Implementation 6.039	Marinas-Pump Out	<p><b>Objective:</b> Develop policy concerning the number (ratio) of pumpout stations per slips in a marinas</p> <p><b>Description:</b> Assessment of current conditions of pump-out facilities and provide pump out ratio for marinas</p>	RWQCB-4	RB4 Marinas	Establish pumpout ratio guidelines for marina operators	7/1/03 to	6/30/08
Pre-Implementation 2.313	Evaluating use of enterococcus as an indicator	<p><b>Objective:</b> Evaluate use of enterococcus as an indicator of public health risk.</p> <p><b>Description:</b> Evaluate the utility of switching from total and fecal coliform indicators to enterococcus as an indicator of public health risk.</p>	SWRCB	Statewide	Decision made on which indicators to use to assess public health risks	7/30/03 to	7/30/05

**Table VB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 2.304-1	Require installation of additional sewage disposal facilities	<p><b>Objective:</b> Reduce disposal of raw sewage into coastal waters from recreational boats.</p> <p><b>Description:</b> Require installation of an adequate number of sewage facilities in RWQCB 4 Marinas and Harbors</p>	SWRCB	Regionwide RB4	Installation of sewage disposal facilities	5/1/05 to 12/31/05
Implement 2.305-1	Require installation of additional sewage disposal facilities	<p><b>Objective:</b> Reduce disposal of raw sewage into coastal and inland waters from recreational boats.</p> <p><b>Description:</b> Require installation of an adequate number of sewage facilities in RWQCB 8 for Newport and Huntington Bays.</p>	SWRCB	Newport and Huntington Bays	Installation of sewage disposal facilities	7/1/03 to 1/1/04
Implement 2.306-1	Require installation of additional sewage facilities	<p><b>Objective:</b> Reduce disposal of raw sewage into coastal and inland waters from recreational boats.</p> <p><b>Description:</b> Require installation of an adequate number of sewage facilities in RWQCBs 2 for Tomales Bay and San Francisco Bay, including Richardson Bay</p>	SWRCB	Tomales, San Francisco and Richardson Bays	Completion of Report and Recommendations and Order requiring installation of sewage disposal facilities	5/1/05 to 12/31/05
Implement 2.312-2	Water Quality Indicator Test	<p><b>Objective:</b> Develop a rapid water quality indicator test as an indicator of public health risk.</p> <p><b>Description:</b> Pursue a rapid water quality analytical test (I.e., less than 8 hours) for measurement of indicator bacteria for human pathogens.</p>	SWRCB	Statewide	Development of a less than 8 hour test that is easy to conduct and of comparable cost to current tests.	8/30/02 to 7/31/03

**Table VB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 32.001-1	Continue Education Programs	<p><b>Objective:</b> Dept. will continue to distribute education materials to marina operators and boating public. Dept. will participate in public boating forums and marine industry meetings and conferences. Provide ongoing application assistance to marina owners and operators for pumpout grants.</p> <p><b>Description:</b> Continue educational program aimed at marina operators to promote pumpout facilities and to get commitment to install new pumpouts.</p>	DBW	Statewide	Distribution of education materials	7/1/03 to 6/30/08
Implement 32.004-1	Use financial incentives to meet minimum standards	<p><b>Objective:</b> Meet standards statewide for marinas and launching facilities by 2008.</p> <p><b>Description:</b> Meet minimum guidelines for pumpout stations, as established by DBW, through financial incentives. (ie: grants to marinas and launch ramps)</p>	DBW	Statewide	Minimum standards are met	7/1/03 to 6/30/08
Track/Monitor 4.061-2	Marina and Houseboat Areas Sampling	<p><b>Objective:</b> Insure compliance with vessel waste no-discharge zone in Richardson Bay</p> <p><b>Description:</b> Conduct annual monitoring for coliform in marinas and houseboat areas along Richardson Bay</p>	RWQCB-2	Marin County	Compliance with water quality objectives for coliform	7/1/03 to 12/31/08
Track/Monitor 4.062-2	Manage contract for Green Marinas program	<p><b>Objective:</b> To oversee contract for Green Marinas project to sample and assess marinas for pollution grant.</p> <p><b>Description:</b> Grant project to develop voluntary performance standards, educate boaters, do water quality monitoring, and to determine pollutant sources (marina vs. stormwater runoff).</p>	RWQCB-2	San Francisco Bay	Development of performance standards, completion of water quality monitoring	7/1/03 to 6/30/05

**Table VB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 4.1H Assessment, Siting, and Design - Waste Management Facilities</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Implement 19.010-1	Marinas and Recreational Boating	<p><b>Objective:</b> To establish and maintain used oil/household hazardous waste collection facilities at marinas and educate boaters about the proper management and disposal of used oil/household hazardous waste they generate.</p> <p><b>Description:</b> Provide grant funds to local jurisdictions and nonprofits to establish used oil/hhw collection facilities at marinas. Provide funds to the California Coastal Commission to manage the Clean and Green Boater Education Campaign and map the location of all marina used oil/hhw collection facilities throughout the state.</p>	CIWMB	Statewide	Number of used oil/hhw collection facilities established at marinas	1/1/03 to 6/30/08
Implement 2.321-1	Coordinate efforts to reduce plastics pollution	<p><b>Objective:</b> Prevent or reduce plastics pollution in the environment.</p> <p><b>Description:</b> Participate in Interagency working group to investigate potential ways in which state governmental agencies can work towards reducing plastics pollution in the environment. Participate in workshop(s) with agency heads to ensure information developed is consistent.</p>	SWRCB	Statewide	Decrease in littered trash as measured by tons of trash collected (I.e., Los Angeles County) Trash receptacles are covered or enclosed	7/1/03 to 6/30/08
Implement 9.009-2	Marinas and Boating	<p><b>Objective:</b> Outreach, education and Implementation of BMPs and engineering to control waste and fuel related to boating and marinas</p> <p><b>Description:</b> Implement BMPs related to waste and fuel management for boating and marinas.</p>	RWQCB-5R	Sacramento and San Joaquin Watersheds	MP's implemented.	7/1/03 to 6/30/08

**Table VB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 4.2 Operation and Maintenance</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 16.402-1	Shelter Island Metals TMDL Development	<b>Objective:</b> To develop Shelter Island Yacht Basin metals TMDL <b>Description:</b> To complete the TMDL, and Basin Plan Amendment, acquire approval of both by RWQCB and SWRCB, as well as USEPA.	RWQCB-9	HU 908	adopted TMDL	7/1/03 to 6/30/08
Implement 16.403-1	Shelter Island Metals TMDL Implementation	<b>Objective:</b> To implement Shelter Island Yacht Basin metals TMDL <b>Description:</b> To perform the coordination and enforcement efforts necessary to implement the TMDL.	RWQCB-9	HU 908	Restoration of beneficial uses and water quality objectives in Shelter Island Yacht Basin.	7/1/03 to 6/30/08
<b>Management Measure: 4.2A Operation and Maintenance - Solid Waste Control</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Implement 2.321-2	Coordinate efforts to reduce plastics pollution	<b>Objective:</b> Prevent or reduce plastics pollution in the environment. <b>Description:</b> Participate in Interagency working group to investigate potential ways in which state governmental agencies can work towards reducing plastics pollution in the environment. Participate in workshop(s) with agency heads to ensure information developed is consistent.	SWRCB	Statewide	Decrease in littered trash as measured by tons of trash collected (I.e., Los Angeles County) Trash receptacles are covered or enclosed	to 6/30/08



**Table VB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 4.2B Operation and Maintenance - Fish Waste Control</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Implement 28.119	Fish Cleaning Stations Maintenance	<p><b>Objective:</b> Maintain fish cleaning stations to prevent pollution impacts</p> <p><b>Description:</b> Fish cleaning stations require special attention to maintain them functioning and prevent pollution problems. An additional person year allocation of 2.5 years is needed to accomplish this program. This is an ongoing annual cost resulting from the construction of these needed facilities.</p>	DPR	Statewide	Fish stations maintained	7/1/03 to 6/30/08

**Table VB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 4.2D Operation and Maintenance - Petroleum Control</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 10.079-1	The Water You Play in is the Water You Drink	<p><b>Objective:</b> Reduce discharge of pollutants from marinas in the Delta.</p> <p><b>Description:</b> Target the cumulative impacts of pathogens (overboard sewage discharges and pet waste), petroleum hydrocarbons (MTBE containing fuel, oil, contaminated bilge water, and solvents), and other liquid wastes (engine and hull maintenance and general marina activities) generated during recreational boating activities.</p>	RWQCB-5S	San Joaquin Delta	Reduction of pollutants from Marina discharges	7/1/03 to 6/30/08
Pre-Implementation 11.23	WQ Impacts to L. Tahoe and Donner L. from PAHs	<p><b>Objective:</b> To evaluate the environmental impacts associated with PAHs in Lake Tahoe and Donner Lake</p> <p><b>Description:</b> Conduct ambient monitoring, phototox assessments, emissions testing, regulatory assessment</p>	RWQCB-6	El Dorado, Nevada Counties	final report, executive summary, management measure recommendations	6/20/01 to 3/31/03
Pre-Implementation 2.322	Assess Boat Design Features and Recommend Improvements	<p><b>Objective:</b> Reduce petroleum releases from boat during operation and during fueling activities.</p> <p><b>Description:</b> Assess boat design and work with boat manufacturers to reduce or eliminate petroleum releases from bilge filtration systems and from boats during fueling activities. Changes are needed at the nozzle (nozzles don't always fit and boat fueling ports are not of a consistent size) and at boat fueling access points. Make recommendations for new laws, if necessary.</p>	SWRCB	Statewide	Design changes made by boat manufacturers prevent spillage of fuel during fueling activities and bilge filtration systems prevent disposal of oily waste water from bilge.	7/1/03 to 6/30/08

**Table VB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 9.009-1	Marinas and Boating	<p><b>Objective:</b> Outreach, education and Implementation of BMPs and engineering to control waste and fuel related to boating and marinas</p> <p><b>Description:</b> Implement BMPs related to waste and fuel management for boating and marinas.</p>	RWQCB-5R	Sacramento and San Joaquin Watersheds	MP's implemented.	7/1/03 to 6/30/08
----------------------	---------------------	--	----------	---------------------------------------	-------------------	-------------------

**Management Measure: 4.2E Operation and Maintenance - Boat Cleaning and Maintenance**

Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Pre-Implementation 10.079-3	The Water You Play in is the Water You Drink	<p><b>Objective:</b> Reduce discharge of pollutants from marinas in the Delta.</p> <p><b>Description:</b> Target the cumulative impacts of pathogens (overboard sewage discharges and pet waste), petroleum hydrocarbons (MTBE containing fuel, oil, contaminated bilge water, and solvents), and other liquid wastes (engine and hull maintenance and general marina activities) generated during recreational boating activities.</p>	RWQCB-5S	San Joaquin Delta	Reduction of pollutants from Marina discharges	7/1/03 to 6/30/08
Implement 2.319	Identify marinas in water bodies on CWA Section 303(d) list	<p><b>Objective:</b> Identify water bodies potentially affected by boat cleaning and maintenance activities at marinas.</p> <p><b>Description:</b> Identify water bodies on CWA Section 303(d) list that are listed for copper, tributyltin, detergents (or other indicators related to boat cleaning and maintenance) and that are potentially affected by discharges at marinas.</p>	SWRCB	Statewide	Identification of impacted marinas	7/1/03 to 6/30/08

**Table VB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

**Management Measure: 4.2F Operation and Maintenance - Maintenance of Sewage Facilities**

Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Pre-Implementation 10.079-2	The Water You Play in is the Water You Drink	<p><b>Objective:</b> Reduce discharge of pollutants from marinas in the Delta.</p> <p><b>Description:</b> Target the cumulative impacts of pathogens (overboard sewage discharges and pet waste), petroleum hydrocarbons (MTBE containing fuel, oil, contaminated bilge water, and solvents), and other liquid wastes (engine and hull maintenance and general marina activities) generated during recreational boating activities.</p>	RWQCB-5S	San Joaquin Delta	Reduction of pollutants from Marina discharges	7/1/03 to 6/30/08
Pre-Implementation 2.314	Assess Enforcement Authorities	<p><b>Objective:</b> Assess enforcement authorities to ensure sewage disposal facilities are operational and maintained</p> <p><b>Description:</b> Assess whether or not adequate enforcement powers/authorities exist for and are being implemented by federal, State, and/or local enforcement personnel. Make recommendations for new laws if needed.</p>	SWRCB	Statewide by Region	Completed assessment with recommendations	7/1/03 to 6/30/08
Pre-Implementation 2.316-2	Identify marinas in water bodies on CWA 303(d) list/bacteria	<p><b>Objective:</b> Identify water bodies potentially affected by sewage waste discharges at marinas</p> <p><b>Description:</b> Identify water bodies on CWA Section 303(d) list that are listed for bacteria (or other indicators related to vessel sewage) and that are potentially affected by discharges at marinas.</p>	SWRCB	Statewide	Data provided to marina operators (port captains, harbor masters, lessors, marina owners, etc.) And the public.	7/1/03 to 6/30/08

**Table VB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 32.002-2	Identify potential funding for pumpout maintenance and installation	<p><b>Objective:</b> Department will continue to participate in federal Clean Vessel Act program.</p> <p><b>Description:</b> Identify future sources of funding for the maintenance and installation of pumpout facilities.</p>	DBW	Statewide	Funding sources identified	7/1/03 to 6/30/08
Pre-Implementation 4.093-1	TMDL for Pathogens, Richardson Bay	<p><b>Objective:</b> Develop TMDL for pathogens in Richardson Bay</p> <p><b>Description:</b> Develop TMDL for pathogens from marinas, boating, urban runoff in Richardson Bay. Richardson Bay is a designated no-discharge zone by EPA</p>	RWQCB-2	San Francisco Bay	Reports and Basin Plan amendment	7/1/04 to 6/30/08
Implement 2.304-2	Require installation of additional sewage disposal facilities	<p><b>Objective:</b> Reduce disposal of raw sewage into coastal waters from recreational boats.</p> <p><b>Description:</b> Require installation of an adequate number of sewage facilities in RWQCB 4 Marinas and Harbors</p>	SWRCB	Regionwide RB4	Installation of sewage disposal facilities	5/1/05 to 12/31/05
Implement 2.305-2	Require installation of additional sewage disposal facilities	<p><b>Objective:</b> Reduce disposal of raw sewage into coastal and inland waters from recreational boats.</p> <p><b>Description:</b> Require installation of an adequate number of sewage facilities in RWQCB 8 for Newport and Huntington Bays.</p>	SWRCB	Newport and Huntington Bays	Installation of sewage disposal facilities	7/1/03 to 1/1/04
Implement 2.306-2	Require installation of additional sewage facilities	<p><b>Objective:</b> Reduce disposal of raw sewage into coastal and inland waters from recreational boats.</p> <p><b>Description:</b> Require installation of an adequate number of sewage facilities in RWQCBs 2 for Tomales Bay and San Francisco Bay, including Richardson Bay</p>	SWRCB	Tomales, San Francisco and Richardson Bays	Completion of Report and Recommendations and Order requiring installation of sewage disposal facilities	5/1/05 to 12/31/05

**Table VB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 32.004-2	Use financial incentives to meet minimum standards	<b>Objective:</b> Meet standards statewide for marinas and launching facilities by 2008. <b>Description:</b> Meet minimum guidelines for pumpout stations, as established by DBW, through financial incentives. (ie: grants to marinas and launch ramps)	DBW	Statewide	Minimum standards are met	7/1/03 to 6/30/08
Implement 6.055	TMDL Implementation for LA Harbor Beaches	<b>Objective:</b> MP implementation <b>Description:</b> Develop TMDL implementation plan and reschedule of implementation	RWQCB-4	Los Angeles County	Delisting on 303 (d) list	7/1/03 to 6/30/08
Track/Monitor 28.112	Recreational Boating sewage holding tank Inspections	<b>Objective:</b> Monitor Houseboat sewage holding tanks and associated piping to assure materials are not entering waterway illegally. <b>Description:</b> Underwater inspection of marina to determine if any houseboats or other boats have damaged or non functional sewage collecting and storage units.	DPR	Northern Buttes District (Lake Oroville)	Identifying defective units or confirming that all are functioning properly.	7/1/03 to 6/30/08

**Management Measure: 4.2G Operation and Maintenance - Boat Operation**

Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Pre-Implementation 4.066-2	Tomales Bay Evaluation of Need for No-Discharge Zone	<b>Objective:</b> To determine the need for a "no-discharge zone" in Tomales Bay. <b>Description:</b> Evaluate the need and requirements for establishing a vessel waste no-discharge zone in Tomales Bay	RWQCB-2	Marin County	Determination of need and requirements	7/1/03 to 6/30/05

**Table VB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 4.3A Education/Outreach - Public Education</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 32.005	Assess existing pollution prevention and control programs	<p><b>Objective:</b> Dept. to participate in the Clean Vessel Act and Clean Boating Networks.</p> <p><b>Description:</b> Assess existing pollution prevention and control programs regionally and statewide.</p>	DBW	Statewide	Completed assessments	7/1/03 to 6/30/08
Pre-Implementation 4.059-2	Marina Technical Advisory Committee Participation	<p><b>Objective:</b> To participate on a technical advisory committee for a marina sampling program.</p> <p><b>Description:</b> Design and implement marina water quality sampling program under BCDC grant program</p>	RWQCB-2	San Francisco Bay	Development and implementation of monitoring program	7/1/03 to 6/30/06
Pre-Implementation 16.402-2	Shelter Island Metals TMDL Development	<p><b>Objective:</b> To develop Shelter Island Yacht Basin metals TMDL</p> <p><b>Description:</b> To complete the TMDL, and Basin Plan Amendment, acquire approval of both by RWQCB and SWRCB, as well as USEPA.</p>	RWQCB-9	HU 908	adopted TMDL	7/1/03 to 6/30/08
Implement 11.9	"On the Water, Hands On" Environmental Education	<p><b>Objective:</b> Educate the Lake Tahoe community on issues concerning conservation of Lake Tahoe and water quality problems</p> <p><b>Description:</b> Conduct hands-on classes on Lake Tahoe which will cover history and facts, research findings, secchi disk readings, ecosystems and pollution prevention</p>	RWQCB-6	EI Dorado County	increased number of class participants	12/1/02 to 6/1/05

**Table VB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 16.403-2	Shelter Island Metals TMDL Implementation	<p><b>Objective:</b> To implement Shelter Island Yacht Basin metals TMDL</p>	RWQCB-9	HU 908	Restoration of beneficial uses and water quality objectives in Shelter Island Yacht Basin.	7/1/03 to 6/30/08
		<p><b>Description:</b> To perform the coordination and enforcement efforts necessary to implement the TMDL.</p>				
Implement 19.010-3	Marinas and Recreational Boating	<p><b>Objective:</b> To establish and maintain used oil/household hazardous waste collection facilities at marinas and educate boaters about the proper management and disposal of used oil/household hazardous waste they generate.</p>	CIWMB	Statewide	Number of used oil/hhw collection facilities established at marinas	1/1/03 to 6/30/08
		<p><b>Description:</b> Provide grant funds to local jurisdictions and nonprofits to establish used oil/hhw collection facilities at marinas. Provide funds to the California Coastal Commission to manage the Clean and Green Boater Education Campaign and map the location of all marina used oil/hhw collection facilities throughout the state.</p>				



**Table VB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 22.010	Boating Clean and Green Campaign	<p><b>Objective:</b> Continue to promote the education of marina operators and boaters on various MMs related to marinas and recreational boating with the focus on petroleum control.</p> <p><b>Description:</b> Co-host the Clean Marinas Conference. Produce approximately 5,000 boater kits annually. Update Tidebooks. Conduct 5 to 7 Dockwalker trainings annually. Partner with local agencies to provide local Dockwalkers support. Mapping environmental services for boaters as prelude to needs assessment. Continue to facilitate CCBN. Produce two editions of Norther California CCBN newsletter insert annually. Promote use of the California Clean Marinas Guidebook.</p>	CCC	California coastal marinas	Dockwalker training sessions. Development and distribution of boater kits and posting of educational materials at marinas. Conference and training evaluations conducted.	7/1/03 to 6/30/08
Implement 32.006	Post educational information at boating facilities	<p><b>Objective:</b> Posting of NPS information in existing and new displays.</p> <p><b>Description:</b> Post-educational information at boat ramps and other areas.</p>	DBW	Statewide	Information posted at boating facilities	7/1/03 to 6/30/08
Implement 32.007	Continue NPS education for Boating Law Enforcement Staff	<p><b>Objective:</b> Continuation of NPS pollution element in Boating Law enforcement training.</p> <p><b>Description:</b> Department to continue to include NPS education component to Boating Law Enforcement as a part of ongoing training.</p>	DBW	Statewide	Staff adequately trained in NPS program	7/1/03 to 6/30/08

**Table VB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 36.010	Boating Clean & Green Program	<p><b>Objective:</b>  Promote increased education of marina operators, owners and boaters in the San Francisco Bay area on environmentally sound boating practices.</p> <p><b>Description:</b>  Participate in CCBN, review and comment on work products such as the California Clean Marinas Guidebook; Participate in Dock Walker program and trainings; Provide technical assistance to marinas, and collaborate with California Marina mapping project. Additional work after 12/31/03 is contingent on receiving outside funding and on continuation of the program.</p>	BCDC	San Francisco Bay	Hold and participate in meetings and Dock Walker training; Participate in Marina Mapping Project.	7/1/03 to 6/30/08
Track/Monitor 4.062-1	Manage contract for Green Marinas program	<p><b>Objective:</b>  To oversee contract for Green Marinas project to sample and assess marinas for pollution grant.</p> <p><b>Description:</b>  Grant project to develop voluntary performance standards, educate boaters, do water quality monitoring, and to determine pollutant sources (marina vs. stormwater runoff).</p>	RWQCB-2	San Francisco Bay	Development of performance standards, completion of water quality monitoring	7/1/03 to 6/30/05

**Table VB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: All- All Marinas Measures</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 2.317	Assess existing enforcement powers	<p><b>Objective:</b> Assess existing enforcement powers and make recommendations for new laws if needed.</p> <p><b>Description:</b> Assess whether or not adequate enforcement powers exist for and are being implemented by federal, State, and/or local enforcement personnel.</p>	SWRCB	Statewide	Completed Enforcement Powers Assessment and Introduction of new legislation, if needed.	7/1/03 to 6/30/08
Pre-Implementation 36.002	Pilot SF Bay Marina Water Quality Study	<p><b>Objective:</b> Establish baseline information, through literature review, data compilation and field sampling, on the condition of selected marinas in the San Francisco Bay regarding selected pollutants, to provide a better understanding of existing water and sediment quality conditions at marinas in SF Bay, and to guide BCDC and other agencies whether additional controls, education programs, and/or expanded marina monitoring programs are warranted.</p> <p><b>Description:</b> Develop and implement pilot marina water and sediment quality sampling study at select SF Bay marinas. Any additional work performed after June 2004 is contingent on receiving outside funding.</p>	BCDC	San Francisco Bay	Data on water and sediment quality at select marinas and presence or absence of pollutants.	8/15/02 to 8/15/04

**Table VB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 36.003	SF Bay Marina and Recreational Boating NPS Task Force Mtg.	<p><b>Objective:</b> Provide a forum for interested parties to jointly address marina related NPS issues in SF Bay; create a public advisory body and scientific body to guide the development and implementation of a pilot marina water quality study.</p> <p><b>Description:</b> Hold quarterly (or as scheduled) task force and TAC meetings in SF staffed by NOAA Coastal Fellow. Any additional work performed after June 2004 is contingent on receiving outside funding.</p>	BCDC	San Francisco Bay	Task force and TAC meetings held	9/17/02 to 8/15/04
Pre-Implementation 36.009	Green Marinas Project Support and Assistance	<p><b>Objective:</b> Help SF BayKeeper carry out the Green Marinas project in SF Bay, which will help implement MMs for marina education and voluntary source reduction.</p> <p><b>Description:</b> Working with the RWQCB-2, review work products and coordinate pathogen monitoring portion of the project with BCDC's pilot marina sampling study (e.g. help define criteria for which marinas to monitor). Any additional work performed after June 2004 is contingent on receiving outside funding.</p>	BCDC	San Francisco Bay	Support and assistance provided for duration of project	7/15/03 to 2/28/06
Pre-Implementation 16.401	Marina Discharge Regulation	<p><b>Objective:</b> To increase the enforcement of Marina pollutant discharges by developing NPDES permits for Marinas.</p> <p><b>Description:</b> Go the the necessary process to develop first-time NPDES permits for marinas in San Diego Region</p>	RWQCB-9	Region 9 Coastal Waters	Completed NPDES permit for Marinas	7/1/03 to 6/30/08

**Table VB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 2.311	Marina and Recreational Boating Workgroup Meetings	<p><b>Objective:</b> Develop partnerships and coordinate activities with those State agencies who are responsible for implementing Marinas and Recreational Boating Management Measures.</p> <p><b>Description:</b> Organize and conduct semi-monthly workgroup meetings to determine ways to effectively and efficiently implement the Marinas and Recreational Boating Management Measures.</p>	SWRCB	Statewide	Number of workgroup meetings	2/7/02 to 6/30/08
Report 22.014	California Clean Marinas Guidebook	<p><b>Objective:</b> Educate marina operators on all appropriate operation and maintenance management practices. Lay the groundwork for a Clean Marina Recognition Program.</p> <p><b>Description:</b> Engage marina operators in revising the first draft of the guidebook. Release the second draft for comment. Revise the draft guidebook according to comments and finalize layout and design. Print for distribution. Promote use of the guidebook if funding is available.</p>	CCC	California coast	Full participation of stakeholders in the development process. Completion of document.	7/1/03 to 6/30/04
Report 36.004	SF Bay Plan Recreation-Marinas NPS Report	<p><b>Objective:</b> Identify whether policy changes to the Bay Plan (Recreation section-Marinas) or other programs, controls and/or expanded monitoring are warranted to address NPS pollution.</p> <p><b>Description:</b> Based on results of marina water quality pilot study, review SF Bay Plan Recreation findings and policies pertaining to marinas and NPS and prepare a report that includes recommendations on NPS pollution controls. Any additional work performed after June 2004 is contingent on receiving outside funding.</p>	BCDC	San Francisco Bay	Generate report	1/1/04 to 8/15/04

**SECTION VI  
HYDROMODIFICATION CATEGORY  
FIVE-YEAR IMPLEMENTATION PLAN  
July 2003 through June 2008**

**A. HYDRODIFICATION MMs AND ISSUES OF CONCERN**

The SWRCB, CCC, and other State agencies have identified seven MMs to address hydromodification sources of nonpoint pollution affecting State waters. These MMs are listed in Table VIA, and further described in Appendix II of this document.

**Table VIA  
Hydromodification Category MMs**

<b>MM Code</b>	<b>Hydromodification MM Title</b>
5.1A	Channelization/Channel Modification: Physical and Chemical Characteristics of Surface Waters
5.1B	Channelization/Channel Modification: Instream and Riparian Habitat Restoration
5.2A	Dams: Erosion and Sediment Control
5.2B	Dams: Chemical and Pollution Control
5.2C	Dams: Protection of Surface Water Quality & Stream and Riparian Habitat
5.3	Streambank and Shoreline Erosion
5.4	Education-Outreach

Hydromodification includes modification of stream and river channels, dams and water impoundments, and streambank and shoreline erosion. Channel modification activities are undertaken in rivers or streams to straighten, enlarge, deepen or relocate the channel. These activities can affect water temperature, change the natural supply of fresh water to a water body, and alter rates and paths of sediment erosion, transport, and deposition, resulting in excessive erosion or deposition. Hardening the banks of waterways with shoreline protection or armor also accelerates the movement of surface water and pollutants from the upper reaches of watersheds into coastal waters. Channelization can also reduce the suitability of instream and streamside habitat for fish and wildlife by depriving wetlands and estuarine shorelines of enriching sediments, affecting the ability of natural systems to filter pollutants, and interrupting the life stages of aquatic organisms (USEPA, 1993).

Dams can adversely impact hydrology and the quality of surface waters and riparian habitat in the waterways where the dams are located. A variety of impacts can result from the siting, construction, and operation of these facilities. For example, improper siting of dams can inundate both upstream and downstream areas of a waterway. Dams reduce downstream flows, thus depriving wetlands and riparian areas of water. During dam construction, removal of vegetation and disturbance of underlying sediments can increase turbidity and cause excessive sedimentation in the waterway.

The erosion of shorelines and streambanks is a natural process that can have either beneficial or adverse impacts on riparian habitat. Excessively high sediment loads resulting from erosion can smother submerged aquatic vegetation, cover shellfish beds and tidal flats, fill in riffle pools, and contribute to increased levels of turbidity and nutrients.

Some NPS activities might include utilization of vegetated treatment systems to reduce pollutant loadings that have been caused by hydromodification. Although these treatment systems cannot be

considered replacements to natural wetlands, this type of activity is listed in the Wetlands and Riparian Category (Section VII) under Wetlands MM 6C, Vegetated Treatment Systems.

## **B. RELATION TO OTHER STATE AND FEDERAL PROGRAMS**

### **1. 401 Water Quality Standards Certification**

Section 401(a)(1) of the Clean Water Act (CWA) specifies that any applicant for a Federal license or permit to conduct any activity, including but not limited to the construction or operation of facilities that may result in any discharge into navigable waters, shall provide the federal licensing or permitting agency a certification from the State in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable water at the point where the discharge originates or will originate, that any such discharge will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the Clean Water Act. Succinctly, this means that in California, the appropriate Regional Board must certify that the project will comply with water quality standards.

The types of permits or licenses requiring 401 Certification are as follows:

- a) Permits issued by the U.S. Army Corps of Engineers (ACOE) under Section 404 of the CWA
- b) NPDES permit issued by the Environmental Protection Agency (EPA) under Section 402 of the Clean Water Act.
- c) Permits issued under Sections 9 and 10 of the Rivers and Harbors Act (for activities that may affect navigation)
- d) Licenses for hydroelectric power plants issued by the Federal Energy Regulatory Commission (FERC) under the Federal Power Act
- e) Licenses issued by the Nuclear Regulatory Commission

### **2. Stormwater Program**

See Urban Category on Stormwater

## **C. OBJECTIVES AND ACTIVITY SUMMARY**

The Hydromodification Category Objectives and agency activities addressing these objectives are provided below.

### **1. Hydromodification Category Objectives**

The State of California recently undertook a concerted, collaborative process for the development of Category Objectives for the NPS Implementation Plan 2003-2008. Over a period of approximately one year, the Statewide IACC met frequently to consider the mission of each agency relative to sources of pollution from hydromodification activities, to formulate a means of collaboration, and to set overall objectives for the implementation process. The results of this effort, which will formulate the focus of California relative to Hydromodification pollution

prevention, are the Category Objectives, which are listed below. These Objectives will serve to guide and measure the progress that will be made over the next five years.

- a) Maintain and restore the physical and chemical characteristics of streams, riparian habitats, and their associated beneficial uses with consistent statewide stream protection policy.
- b) Develop information on MP implementation to ensure consistent requirements, implementation, and effectiveness of mitigation and restoration projects.
- c) Prevent and control streambank, shoreline and beach erosion with a consistent statewide policy and watershed approach.
- d) Promote interagency collaboration in habitat restoration projects and continue to improve upon and expand partnerships and coordination in tackling the issue of eroding streambanks and shorelines.
- e) Enhance outreach and promote information exchange among State agencies, local entities, and interested parties.
- f) Continue to assess waterbodies, identify sources of NPS impacts from hydromodification activities as well as increase inspections.
- g) Develop and implement watershed-based plans, including TMDLs in order to identify and address impacts from hydromodification activities.
- h) Streamline the permitting process for wetland and riparian protection and restoration projects, including swift measures for invasive species eradication.

## **2. Activity Summary for Hydromodification Category**

Activities for implementation during 2003 to 2008 have been proposed for all hydromodification MMs, and are listed in Table VIB. Channelization and channel modification MMs have the most activities taking place, with MM 5.1B, Instream and Riparian Habitat Restoration, garnering the most attention. Similarly, the participating agencies plan to actively engage in streambank and shoreline erosion, and education and outreach activities. In addition, several activities are proposed to address all MMs.

All eight Category Objectives are supported by the proposed activities. The emphasis is clearly on maintaining and restoring the physical and chemical characteristics of streams and their associated beneficial uses with consistent statewide stream protection policy, and enhancing outreach and education to State agencies and local entities and interested parties.



**Table VIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

**Hydromodification**

**Management Measure: 5.1A Channelization/Channel Modification - Physical and Chemical Characteristics of Surface Waters**

Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Pre-Implementation 27.005-1	Watershed Restoration Project Review	<b>Objective:</b> To coordinate watershed restoration project review with partner agencies. <b>Description:</b> Assist DFG and DPR with the review of stream channel conditions and watershed restoration projects under various legislative requirements.	DOC	Statewide	Completed review of pertinent projects	7/1/03 to 6/30/08
Pre-Implementation 4.068-1	Stream Floodplain Planning Activities	<b>Objective:</b> To participate in regional and state floodplain planning objectives, such as Floodplain Management Coordinating Group. <b>Description:</b> Advising floodplain group on Regional Board issues and concerns	RWQCB-2	Statewide	Meeting participation	7/1/03 to 12/31/04
Implement 2.406-1	Identify Management Practices for channel maintenance activities	<b>Objective:</b> Pollution impacts reduced through implementation of management practices. <b>Description:</b> Identify Management Practices for channel maintenance activities and prepare Guidance. Management Practices Guidance information will be used to avoid NPS impacts from channel maintenance activities.	SWRCB	Statewide	Management Practices Guidance information	3/1/03 to 11/30/03
Implement 4.067-1	Stream Protection and Management Amendments	<b>Objective:</b> Develop stream protection and management amendments. <b>Description:</b> Prepare Basin Plan amendment incorporating stream protection policy	RWQCB-2	Regionwide RB2	Improved protection for streams	7/1/03 to 7/1/04

**Table VIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 4.069-1	WDRs for Channel Maintenance Activities	<p><b>Objective:</b> Issue general WDRs for low impact channel maintenance activities.</p> <p><b>Description:</b> Waste Discharge Requirements for stream channel maintenance activities by flood control districts</p>	RWQCB-2	Regionwide RB2	Issuance of permit	7/1/03 to 12/31/04
Implement 4.085-1	TMDL for Mercury, Guadalupe River	<p><b>Objective:</b> Develop TMDL for mercury in Guadalupe River and tributary streams</p> <p><b>Description:</b> Prepare preliminary and final project reports for TMDL. One area to be addressed will be bank stabilization and thus stabilization of mercury laden sediments.</p>	RWQCB-2	Santa Clara County	Preliminary and final reports, Basin Plan amendment	7/1/03 to 6/30/06
Implement 6.003	Phase III: Calleguas Creek Watershed Treatment Project	<p><b>Objective:</b> To continue water quality improvement measures in Calleguas Creek</p> <p><b>Description:</b> This project is phase III of the water quality improvement efforts and consists of implementing BMPs identified and evaluated under phase III, development of a regional stream bank and bed permit streamlining program, information and technology transfer.</p>	RWQCB-4	Ventura County	BMP Implementation	4/1/02 to 3/30/05
Report 6.067	Urbanization and Stream Erosion Prevention Model	<p><b>Objective:</b> Develop numeric standards and guidelines for protecting stream channels and habitat from runoff rate and volume modifications.</p> <p><b>Description:</b> Field measurements and computer modeling of hydrologic system (upper Arroyo Simi) and erosion in stream channels. Analysis and verification of model output, link flow rates to measured erosion, predict erosion for future development scenarios, evaluate BMPs for mitigation.</p>	RWQCB-4	Ventura County	Useable criteria/guidelines	7/1/03 to 7/1/08

**Table VIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 5.1B Channelization/Channel Modification - Instream and Riparian Habitat Restoration</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 10.086	Invasive Species Inventory, Eradication and Monitoring	<p><b>Objective:</b> Remove impairment caused by invasive species.</p> <p><b>Description:</b> Inventory, eradicate, monitor eradication efforts and educate the public on two invasive riparian species of concern, Arundo donax and Tamarix spp</p>	RWQCB-5S	Lake County	Reduction in impairment	7/1/03 to 6/30/08
Pre-Implementation 27.005-2	Watershed Restoration Project Review	<p><b>Objective:</b> To coordinate watershed restoration project review with partner agencies.</p> <p><b>Description:</b> Assist DFG and DPR with the review of stream channel conditions and watershed restoration projects under various legislative requirements.</p>	DOC	Statewide	Completed review of pertinent projects	7/1/03 to 6/30/08
Pre-Implementation 27.014	Big River State Park - Restoration Planning	<p><b>Objective:</b> Assist DPR with resource assessments for setting park restoration priorities.</p> <p><b>Description:</b> Compile geologic and geomorphic data; identify potential erosion and delivery sites along stream channels and roads; evaluate culvert crossings; prioritize work; develop GIS data.</p>	DOC	Mendocino County	Identification of sediment sources in GIS database. Prioritization of highest risk sites for restoration.	6/1/03 to 12/31/03

**Table VIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 27.015	Fort Ross State Historic Park - Hazard Mitigation	<p><b>Objective:</b> Assist DPR in providing watershed assessment, characterizing channel conditions and prioritizing restoration sites. Examine roads and culverts for potential sediment delivery.</p> <p><b>Description:</b> Compile existing geologic and geomorphic data, conduct stream surveys, and classify channel segments by transport potential. Identify sediment sources. Compile data in GIS format.</p>	DOC	Sonoma County	Identification of sediment sources in GIS database. Prioritization of highest risk sites.	6/1/03 to 12/31/03
Pre-Implementation 4.068-2	Stream Floodplain Planning Activities	<p><b>Objective:</b> To participate in regional and state floodplain planning objectives, such as Floodplain Management Coordinating Group.</p> <p><b>Description:</b> Advising floodplain group on Regional Board issues and concerns</p>	RWQCB-2	Statewide	Meeting participation	7/1/03 to 12/31/04
Implement 10.089	Putah Creek Yolo Housing Authority Project	<p><b>Objective:</b> Improve riparian and instream habitat on Putah Creek.</p> <p><b>Description:</b> Remove invasive weeds and establish native vegetation on 8.3 acres of creek channel and associated uplands; removal of eucalyptus, tree-of-heaven and Himalyan blackberries, establishment of native vegetation, improved wildlife habitat, erosion control, trash cleanup, community involvement and educational opportunities.</p>	RWQCB-5S	Regionwide RB5	Restored habitat	7/1/03 to 6/30/08
Implement 11.20-1	Davies&Merril Creeks Watershed Restoration	<p><b>Objective:</b> To improve and restore water quality and beneficial uses.</p> <p><b>Description:</b> Restore riparian habitat and floodplain altered by historic railroad grade construction; includes public outreach component and citizen monitoring.</p>	RWQCB-6	Nevada County	Completed restoration project.	12/1/02 to 12/1/06

**Table VIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 11.53	Markleeville Creek Day	<b>Objective:</b> To educate community and engage volunteers in stream improvement projects such as planting native vegetation <b>Description:</b> education, outreach, BMP implementation	RWQCB-6	Alpine County	completion of event	7/1/03 to 6/30/08
Implement 11.64	Bagley Valley Restoration Project	<b>Objective:</b> stream restoration to reduce erosion and restore aquatic habitat and monitor restoration success. <b>Description:</b> implement BMPs to reduce impact of hydromodification and grazing; monitor restoration success. Benthic macroinvertebrates sampling, water column monitoring, rewatering of lower valley	RWQCB-6	Alpine County	reduced erosion, restored stream function, restored habitat	1/1/01 to 1/1/06
Implement 15.091	Invasive Species Management	<b>Objective:</b> Eradicate tamarisk ( <i>Tamarix reamosissima</i> , <i>T. chinensis</i> , and hybrids) throughout the watershed. <b>Description:</b>	RWQCB-8	Regionwide RB8	Elimination of Tamarisk	7/1/03 to 6/30/08
Implement 2.406-2	Identify Management Practices for channel maintenance activities	<b>Objective:</b> Pollution impacts reduced through implementation of management practices. <b>Description:</b> Identify Management Practices for channel maintenance activities and prepare Guidance. Management Practices Guidance information will be used to avoid NPS impacts from channel maintenance activities.	SWRCB	Statewide	Management Practices Guidance information	3/1/03 to 11/30/03
Implement 27.013-1	Annadel State Park - Lake Ilsanjo Spillway Rehabilitation	<b>Objective:</b> Provide support to Department of Parks and Recreation (DPR) in the rehabilitation of the existing Lake Ilsanjo Spillway. <b>Description:</b> Set grade controls for cross-sections along spillway alignment; Provide guidance and director for earth works; Monitor site work.	DOC	Annadel State Park, Sonoma County	Completion of project within time frames with no major upsets.	6/1/03 to 1/31/04

**Table VIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 4.067-2	Stream Protection and Management Amendments	<p><b>Objective:</b> Develop stream protection and management amendments.</p> <p><b>Description:</b> Prepare Basin Plan amendment incorporating stream protection policy</p>	RWQCB-2	Regionwide RB2	Improved protection for streams	7/1/03 to	7/1/04
Implement 4.069-2	WDRs for Channel Maintenance Activities	<p><b>Objective:</b> Issue general WDRs for low impact channel maintenance activities.</p> <p><b>Description:</b> Waste Discharge Requirements for stream channel maintenance activities by flood control districts</p>	RWQCB-2	Regionwide RB2	Issuance of permit	7/1/03 to	12/31/04

**Table VIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 5.2A Dams - Erosion and Sediment Control</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 11.32	Bear Creek TMDL	<b>Objective:</b> Watershed restoration through the TMDL program <b>Description:</b> Complete and implement the Bear Creek TMDL	RWQCB-6	Nevada County	completed TMDL	1/1/02 to 1/1/05
Pre-Implementation 2.608	Upper Yuba River Studies	<b>Objective:</b> Participate on a multiagency team to evaluate the potential to successfully restore salmon migration to the south fork of the Yuba River. <b>Description:</b> The comprehensive effort hinges on removing Englebright dam (a dam completed in 1940) or providing an alternative course for migratory fish around the dam. SWRCB role is as a technical participant.	SWRCB	Nevada County	Decision to restore the salmon run.	7/1/03 to 6/30/08
Implement 27.013-2	Annadel State Park - Lake Ilsanjo Spillway Rehabilitation	<b>Objective:</b> Provide support to Department of Parks and Recreation (DPR) in the rehabilitation of the existing Lake Ilsanjo Spillway. <b>Description:</b> Set grade controls for cross-sections along spillway alignment; Provide guidance and director for earth works; Monitor site work.	DOC	Annadel State Park, Sonoma County	Completion of project within time frames with no major upsets.	6/1/03 to 1/31/04
Implement 4.037-1	Manage contract for dam removal	<b>Objective:</b> Oversee contract for dam removal and habitat restoration <b>Description:</b> Removal of two dams (Niles and Sunol) on Alameda Creek, restore access to 7.5 miles of prime steelhead spawning and rearing habitat, restore riparian habitat along portions of the creek.	RWQCB-2	Alameda County	Successful dam removal and restoration of habitat	7/1/03 to 6/30/07

**Table VIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 5.2B Dams - Chemical and Pollutant Control</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 11.37	Pleasant Valley Reservoir TMDL	<b>Objective:</b> watershed restoration through the TMDL program <b>Description:</b> Complete and implement the Pleasant Valley Reservoir TMDL	RWQCB-6	Inyo County	completed TMDL	1/1/03 to 1/1/06
<b>Management Measure: 5.2C Dams - Protection of Surface Water Quality &amp; Instream and Riparian Habitat</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Implement 11.19-2	Indian Creek Reservoir Freshwater Delivery	<b>Objective:</b> To reduce external phosphorus loading from freshwater delivery system <b>Description:</b> Contain water currently in open ditch. Portions of Snowshoe Thompson Ditch #1 currently in open ditch will be piped to prevent soil (containing phosphorus) from sloughing into freshwater delivery system.	RWQCB-6	Alpine County	Reduced phosphorus concentration in delivered water.	12/1/02 to 12/1/06
Implement 4.037-2	Manage contract for dam removal	<b>Objective:</b> Oversee contract for dam removal and habitat restoration <b>Description:</b> Removal of two dams (Niles and Sunol) on Alameda Creek, restore access to 7.5 miles of prime steelhead spawning and rearing habitat, restore riparian habitat along portions of the creek.	RWQCB-2	Alameda County	Successful dam removal and restoration of habitat	7/1/03 to 6/30/07



**Table VIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 5.3A Streambank and Shoreline Erosion - Eroding Streambanks &amp; Shorelines</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 11.35	Bronco Creek TMDL	<b>Objective:</b> watershed restoration through the TMDL program <b>Description:</b> Complete and implement the Bronco Creek TMDL	RWQCB-6	Nevada County	completed TMDL	1/1/02 to 1/1/05
Pre-Implementation 11.36	Gray Creek TMDL	<b>Objective:</b> watershed restoration through the TMDL program <b>Description:</b> Complete and implement the Gray Creek TMDL	RWQCB-6	Nevada County	completed TMDL	1/1/02 to 1/1/05
Implement 11.19-1	Indian Creek Reservoir Freshwater Delivery	<b>Objective:</b> To reduce external phosphorus loading from freshwater delivery system <b>Description:</b> Contain water currently in open ditch. Portions of Snowshoe Thompson Ditch #1 currently in open ditch will be piped to prevent soil (containing phosphorus) from sloughing into freshwater delivery system.	RWQCB-6	Alpine County	Reduced phosphorus concentration in delivered water.	12/1/02 to 12/1/06
Implement 4.037-3	Manage contract for dam removal	<b>Objective:</b> Oversee contract for dam removal and habitat restoration <b>Description:</b> Removal of two dams (Niles and Sunol) on Alameda Creek, restore access to 7.5 miles of prime steelhead spawning and rearing habitat, restore riparian habitat along portions of the creek.	RWQCB-2	Alameda County	Successful dam removal and restoration of habitat	7/1/03 to 6/30/07

**Table VIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 4.085-2	TMDL for Mercury, Guadalupe River	<p><b>Objective:</b> Develop TMDL for mercury in Guadalupe River and tributary streams</p> <p><b>Description:</b> Prepare preliminary and final project reports for TMDL. One area to be addressed will be bank stabilization and thus stabilization of mercury laden sediments.</p>	RWQCB-2	Santa Clara County	Preliminary and final reports, Basin Plan amendment	7/1/03 to 6/30/06
Implement 8.002	Panoche Creek Revitalization Project	<p><b>Objective:</b> Implement projects to stabilize the lower Panoche Creek to decrease erosion</p> <p><b>Description:</b> Contractor will implement BMPs as recommended in their watershed management plan and monitor their effectiveness.</p>	RWQCB-5F	Fresno County	BMPs implemented.	9/1/00 to 12/31/03

**Table VIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 5.4A Education/Outreach - Educational Programs</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 4.070	Stream protection policy training	<p><b>Objective:</b> Provide training on stream protection Basin Plan amendments and review of hydromodification projects.</p> <p><b>Description:</b> Provide training on stream protection throughout the state using Region 2 proposed stream protection policy and Basin Plan amendments. Review of hydromodification projects for statewide audience and for achieving consistency statewide.</p>	RWQCB-2	Statewide	Trainings and development of policies by other regions	7/1/03 to 12/31/06
Implement 11.20-2	Davies&Merril Creeks Watershed Restoration	<p><b>Objective:</b> To improve and restore water quality and beneficial uses.</p> <p><b>Description:</b> Restore riparian habitat and floodplain altered by historic railroad grade construction; includes public outreach component and citizen monitoring.</p>	RWQCB-6	Nevada County	Completed restoration project.	12/1/02 to 12/1/06
Implement 4.067-3	Stream Protection and Management Amendments	<p><b>Objective:</b> Develop stream protection and management amendments.</p> <p><b>Description:</b> Prepare Basin Plan amendment incorporating stream protection policy</p>	RWQCB-2	Regionwide RB2	Improved protection for streams	7/1/03 to 7/1/04
Implement 4.085-3	TMDL for Mercury, Guadalupe River	<p><b>Objective:</b> Develop TMDL for mercury in Guadalupe River and tributary streams</p> <p><b>Description:</b> Prepare preliminary and final project reports for TMDL</p>	RWQCB-2	Santa Clara County	Preliminary and final reports, Basin Plan amendment	7/1/03 to 6/30/06

**Table VIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: All-H All Hydromodification Measures</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 5.021	Assist interagency streamlined permitting process	<p><b>Objective:</b> To provide technical assistance in permit streamlining projects</p> <p><b>Description:</b> Provide technical assistance and participate in development of watershed agriculture working groups, facilitate implementation of regional Ag Water Quality Management Plan.</p>	RWQCB-3	Regionwide RB3	Streamlined permit process in all watersheds within the region	7/1/03 to 6/30/08
Pre-Implementation 5.501	Assist hydromodification project evaluation for impacts	<p><b>Objective:</b> Prevent water quality impacts associated with hydromodification activities</p> <p><b>Description:</b> Review and comment on proposed hydromodification activities, activities performed through Regional Board's 401 Water Quality Certification program.</p>	RWQCB-3	Regionwide RB3	Adequately conditioned hydromodification projects	7/1/03 to 6/30/08
Implement 16.501	Regulation of Hydromodification Sources of NPS Pollution	<p><b>Objective:</b> To regulate hydromodification</p> <p><b>Description:</b> To enforce Region 9 waiver policies where they apply to hydromodification activities.</p>	RWQCB-9	Regionwide - Region 9	Protection and restoration of water quality and beneficial uses.	7/1/03 to 6/30/08

**Table VIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 2.400	Develop Technical Assistance Manual and CEQA Appendix	<p><b>Objective:</b> Provide technical assistance to avoid adverse impacts to wetlands and riparian areas.</p> <p><b>Description:</b> Develop a technical assistance manual and CEQA Guidelines Appendix for project design that will include guidelines for designing projects to avoid impacts to wetlands and riparian areas. Adopt Waste Discharge Requirements that prescribe channel maintenance activities with minimal threat to water quality.</p>	SWRCB	Statewide	Manual and CEQA Guidelines Appendix developed and approved	7/1/03 to 6/30/08
Implement 2.401	Provide technical training	<p><b>Objective:</b> Train Regional Board and Local Agency staff</p> <p><b>Description:</b> Provide training to Regional Board and Local Agency staffs so that they are knowledgeable how practices necessary to avoid adverse impacts to wetlands and riparian areas. Ensure projects are designed to avoid impacts to wetlands and riparian areas.</p>	SWRCB	Statewide	Adequately trained staffs	9/1/03 to 9/30/03
Implement 2.402	Ensure compliance with CEQA and Porter-Cologne Act	<p><b>Objective:</b> Ensure CEQA and Porter-Cologne Act compliance.</p> <p><b>Description:</b> Ensure compliance with CEQA and Porter-Cologne Act when certifying activities included in national permits</p>	SWRCB	Statewide	Activities are in compliance with CEQA and Porter-Cologne Act requirements	7/1/03 to 6/30/08
Implement 2.403	Establish Formal Agreements	<p><b>Objective:</b> Streamline the permitting process and better protect resources</p> <p><b>Description:</b> Establish formal agreements between agencies on program-level issues in order to streamline the permitting process and better protect resources</p>	SWRCB	Statewide	Permitting process is streamlined and resources are better protected.	7/1/03 to 6/30/08

**Table VIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 2.404	Improve Emergency Permits	<p><b>Objective:</b> Modify and improve emergency permits</p> <p><b>Description:</b> Work cooperatively with ACOE on modifying and improving emergency permits.</p>	SWRCB	Statewide	Emergency permit process is improved	7/1/03 to 6/30/08
Implement 2.405	Disseminate up-to-date technical information	<p><b>Objective:</b> Assist entities engaged in hydromodification activities</p> <p><b>Description:</b> Assist entities engaged in hydromodification activities by disseminating up-to-date technical information on: (1) flood plain methods which preserve natural riparian values; (2) construction and long-term maintenance costs of traditional and alternative flood management approaches; (3) setbacks in floodplains and designating floodways; and examples of existing ordinances and policies which minimize the need for channelization and channel hardening.</p>	SWRCB	Statewide	Entities are provided with the necessary MM and MP information	7/1/03 to 6/30/08
Implement 6.035	Saticoy Recycle and Groundwater Recharge Facility	<p><b>Objective:</b> Improve groundwater recharge in the Calleguas Creek area.</p> <p><b>Description:</b> Project will result in groundwater recharge with treated effluent that would otherwise be discharged into the ocean. It is more of a conjunctive use than water quality improvement project. It is consistent with the program criteria since it would support groundwater recharge capabilities and the expected chloride TMDL for Calleguas Creek.</p>	RWQCB-4	Ventura County	Will be finalized at contract approval time	7/1/03 to 6/30/08

**SECTION VII**  
**WETLANDS, RIPARIAN AREAS, AND VEGETATED TREATMENT SYSTEMS**  
**FIVE-YEAR IMPLEMENTATION PLAN**  
**July 2003 through June 2008**

**A. WETLANDS CATEGORY MMs AND ISSUES OF CONCERN**

The SWRCB, CCC, and other State agencies have identified four MMs in the land use category of Wetlands, Riparian Areas, and Vegetated Treatment Systems (Wetlands). These MMs promote the protection and restoration of wetlands and riparian areas, and the use of vegetated treatment systems as means to control nonpoint sources of pollution. Wetlands MMs are listed in Table VIIA, below and further described in Appendix II of this document.

**Table VIIA**  
**Wetlands Category MMs**

<b>MM Code</b>	<b>Wetlands MM Title</b>
6A	Wetlands-Riparian Areas Protection
6B	Wetlands-Riparian Areas Restoration
6C	Vegetated Treatment Systems
6D	Education-Outreach

Wetlands and riparian areas reduce polluted runoff by filtering out runoff-related contaminants such as sediment, nitrogen and phosphorus. Therefore, maintaining the water quality benefits of these areas is important. These areas also help to attenuate flows from higher-than-average storm events. This protects downstream areas from adverse impacts such as channel scour, erosion and temperature and chemical fluctuations. Changes in hydrology, substrate, geochemistry, or species composition can impair the ability of wetland or riparian areas to filter out excess sediment and nutrients, and so can result in deteriorated water quality. The following activities can cause such impairment: drainage of wetlands for cropland or development, overgrazing, hydromodification, highway construction, deposition of dredged material, and excavation for ports and marinas.

**B RELATION TO OTHER SWRCB PROGRAMS**

**1. 401 Water Quality Standards Certification**

See Hydromodification Category, Section VI.

**2. Stormwater Program**

See Urban Category, Section IV.

**C. OBJECTIVES AND ACTIVITY SUMMARY**

## **1. Wetlands, Riparian Areas, and Vegetated Treatment Systems Category Objectives**

The State of California recently undertook a concerted, collaborative process for the development of Category Objectives for the NPS Implementation Plan 2003-2008. Over a period of approximately one year, the Statewide Interagency Coordinating Committee met frequently to consider the mission of each agency relative to wetlands, riparian areas, and vegetated treatment systems; to formulate a means of collaboration, and to set overall objectives for the collaborative process. The results of this effort, which will formulate the focus of California relative to pollution prevention, are the Wetlands, Riparian Areas and Vegetated Treatment Systems Category Objectives, which are listed below. These Objectives will serve to guide and measure the progress that will be made over the next five years.

- a) Identify, require and/or implement wetland protection management practices to protect wetlands from NPS pollution.
- b) Promote and assist the incorporation of wetland and riparian habitats at the watershed scale and incorporate their protection into local planning processes.
- c) Work with IACC agencies, whose activities affect the health or function of wetland/riparian areas, to develop agency-specific wetland/riparian protection policies, and to assist in the exercise of their authority to implement those policies.
- d) Develop or modify and enforce wetland restoration standards on all restoration and mitigation projects.
- e) Develop and promote a consistent means of evaluating and guiding riparian and wetland projects.
- f) Fund wetland/riparian restoration projects on a watershed basis.
- g) Streamline the permitting process for wetland and riparian protection and restoration projects, including swift measures for invasive species eradication.
- h) Evaluate efficacy of vegetated treatment systems (VTS) for different categories of pollutants. Develop design criteria, standards, and guidelines.
- i) Develop public education and outreach materials for distinguishing between habitat wetlands and VTSs, and detailing the regulatory maze and requirements for habitat wetlands and VTSs.
- j) Develop educational planning workshops and/or outreach materials for locally elected officials, and landowners, managers, developers and operations whose activities present threats to wetland/riparian areas.
- k) Broaden partnership, coordination, and public participation in streambank and wetland monitoring and restoration projects.

## **2. Activity Summary for California**



Activities proposed for 2003 to 2008 have been distributed fairly equally among the MMs. The exception is MM 6C, Vegetated Treatment Systems, for which few activities have been proposed. In addition, several listed activities are designed to address all Wetlands MMs, and Section I of this document references many broad-scope activities that address all Categories and MMs of the Five-Year Plan. The Wetlands activity list is provided in Table VIIB.

**Table VIIB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

**Wetlands**

<b>Management Measure: 6A Protection of Wetlands &amp; Riparian Areas</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 2.507-3	Compliance Monitoring	<p><b>Objective:</b> Establish consistent compliance monitoring criteria for compensatory mitigation projects.</p> <p><b>Description:</b> Develop compliance monitoring criteria for compensatory mitigation projects.</p>	SWRCB	Statewide	Compensatory mitigation projects are monitored consistently	7/1/03 to 6/30/08
Pre-Implementation 27.011	Mineral Resources & Mineral Hazards Mapping Program	<p><b>Objective:</b> Identify and assess natural geological sources of geochemical and mineralogical materials such as mercury, arsenic, cadmium, selenium etc. that are potentially harmful to plant or animal species that inhabit wetlands and riparian areas.</p> <p><b>Description:</b> Identify/quantify NPS sources of metals within priority watersheds, and enter into partnerships to develop mitigation measures where feasible.; current focus is on mercury.</p>	DOC	Sacramento River	Completed assessment and partnership formation.	2/1/03 to 4/30/05
Pre-Implementation 4.045-1	TMDL for Dissolved Oxygen, Suisun Marsh	<p><b>Objective:</b> Develop and implement TMDL</p> <p><b>Description:</b> Develop and implement TMDL for Suisun Marsh</p>	RWQCB-2	Solano County	Completed TMDL and Basin Plan amendment	1/1/04 to 6/30/08
Pre-Implementation 4.071-1	Wetland Planning Activities Participation	<p><b>Objective:</b> Participate in regional wetland planning activities, development of regional initiatives</p> <p><b>Description:</b> Regional Board staff participation in planning activities such as Bay Area Wetlands Restoration and Joint Venture Group.</p>	RWQCB-2	Regionwide RB2	Joint planning and implementation activities	7/1/03 to 12/31/08

**Table VIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 4.083-1	Manage contract on citizen monitoring & assessment	<p><b>Objective:</b> Oversee contract for Contra Costa citizen watershed monitoring and assessment program</p> <p><b>Description:</b> This project will include bioassessment workshops, citizen monitoring, creek surveys</p>	RWQCB-2	Contra Costa County	Creek surveys and bioassessments	7/1/03 to 12/31/05
Implement 16.601-1	Wetlands Recovery Project	<p><b>Objective:</b> To provide input into the Southern California Wetlands Recovery Project.</p> <p><b>Description:</b> Active participation in Southern California Wetlands Recovery Project, including Wetlands Managers Group, San Diego County Wetlands Task Force and Orange County Wetlands Task Force.</p>	RWQCB-9	Regionwide - Region 9	Protection and restoration of water quality and beneficial uses.	7/1/03 to 6/30/08
Implement 16.602-1	Wetlands Advisory Board	<p><b>Objective:</b> To provide input into the city of San Diego Wetlands Advisory board..</p> <p><b>Description:</b> To activity participate in the city of San Diego Wetlands Advisory Board.</p>	RWQCB-9	Regionwide - Region 9	complete participation in the City of San Diego Wetlands Advisory Board activities.	7/1/03 to 6/30/08
Implement 2.500-1	Develop technical assistance guidance manual	<p><b>Objective:</b> Assist local governments and small business with guidelines</p> <p><b>Description:</b> Develop a technical assistance manual that will assist local governments and small business with guidelines for designing projects to avoid wetlands and riparian areas.</p>	SWRCB	Statewide	Developed manual	7/1/03 to 6/30/08

**Table VIIB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 2.501-1	Restore and enhance wetland and riparian resources	<p><b>Objective:</b> Restore and enhance wetland and riparian resources</p> <p><b>Description:</b> Restore and enhance wetland and riparian resources through mitigation requirements and by setting criteria for grant and loan projects.</p>	SWRCB	Statewide	Mitigation requirements; grant and loan criteria	7/1/03 to 6/30/08
Implement 2.506-1	Establish Formal Agreements	<p><b>Objective:</b> Establish formal agreements to streamline the permitting process and better protect resources.</p> <p><b>Description:</b> Establish formal agreements between agencies on program-level issues in order to streamline the permitting process and better protect resources</p>	SWRCB	Statewide	Formalized agreements	7/1/03 to 6/30/08
Implement 6.044	TMDL Implementation for Malibu-Pathogens	<p><b>Objective:</b> BMP Implementation</p> <p><b>Description:</b> MP Implementation</p>	RWQCB-4	Malibu	Delisting from 303 (d) list	3/1/00 to 11/6/13
Track/Monitor 4.072-1	Wetlands: Baylands Wetlands Projects review	<p><b>Objective:</b> Modification of projects within or near Baylands in conformance with Regional Wetland Goals.</p> <p><b>Description:</b> Review of projects, monitor mitigation efforts</p>	RWQCB-2	Regionwide RB2	Project reviews, regional plans, staff trainings	7/1/03 to 12/31/08

**Table VIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 6B Restoration of Wetlands &amp; Riparian Areas</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 2.507-1	Compliance Monitoring	<p><b>Objective:</b> Establish consistent compliance monitoring criteria for compensatory mitigation projects.</p> <p><b>Description:</b> Develop compliance monitoring criteria for compensatory mitigation projects.</p>	SWRCB	Statewide	Compensatory mitigation projects are monitored consistently	7/1/03 to 6/30/08
Pre-Implementation 4.073	National Park Service Restoration Projects Coordination	<p><b>Objective:</b> Coordinate with the NPS on numerous restoration projects.</p> <p><b>Description:</b> Meet with National Park Service to coordinate permitting on restoration projects and develop effective permitting options</p>	RWQCB-2	Marin County	Development and implementation of effective, streamlined permitting procedure	7/1/03 to 12/31/05
Pre-Implementation 4.083-2	Manage contract on citizen monitoring & assessment	<p><b>Objective:</b> Oversee contract for Contra Costa citizen watershed monitoring and assessment program</p> <p><b>Description:</b> This project will include bioassessment workshops, citizen monitoring, creek surveys</p>	RWQCB-2	Contra Costa County	Creek surveys and bioassessments	7/1/03 to 12/31/05
Implement 11.65	Upper Truckee River Wetlands Restoration	<p><b>Objective:</b> Watershed restoration.</p> <p><b>Description:</b> Activities related to restoration.</p>	Cal/RA	El Dorado County	Completed restoration project	7/1/03 to 6/30/08

**Table VIIB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 16.601-2	Wetlands Recovery Project	<p><b>Objective:</b> To provide input into the Southern California Wetlands Recovery Project.</p> <p><b>Description:</b> Active participation in Southern California Wetlands Recovery Project, including Wetlands Managers Group, San Diego County Wetlands Task Force and Orange County Wetlands Task Force.</p>	RWQCB-9	Regionwide - Region 9	Protection and restoration of water quality and beneficial uses.	7/1/03 to 6/30/08
Implement 16.602-2	Wetlands Advisory Board	<p><b>Objective:</b> To provide input into the city of San Diego Wetlands Advisory board..</p> <p><b>Description:</b> To activity participate in the city of San Diego Wetlands Advisory Board.</p>	RWQCB-9	Regionwide - Region 9	complete participation in the City of San Diego Wetlands Advisory Board activities.	7/1/03 to 6/30/08
Implement 2.500-2	Develop technical assistance guidance manual	<p><b>Objective:</b> Assist local governments and small business with guidelines</p> <p><b>Description:</b> Develop a technical assistance manual that will assist local governments and small business with guidelines for designing projects to avoid wetlands and riparian areas.</p>	SWRCB	Statewide	Developed manual	7/1/03 to 6/30/08
Implement 2.501-2	Restore and enhance wetland and riparian resources	<p><b>Objective:</b> Restore and enhance wetland and riparian resources</p> <p><b>Description:</b> Restore and enhance wetland and riparian resources through mitigation requirements and by setting criteria for grant and loan projects.</p>	SWRCB	Statewide	Mitigation requirements; grant and loan criteria	7/1/03 to 6/30/08

**Table VIIB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 2.501-3	Restore and enhance wetland and riparian resources	<p><b>Objective:</b> Restore and enhance wetland and riparian resources</p> <p><b>Description:</b> Restore and enhance wetland and riparian resources through mitigation requirements and by setting criteria for grant and loan projects.</p>	SWRCB	Statewide	Grant and loan mitigation criteria.	7/1/03 to 6/30/08
Implement 2.506-2	Establish Formal Agreements	<p><b>Objective:</b> Establish formal agreements to streamline the permitting process and better protect resources.</p> <p><b>Description:</b> Establish formal agreements between agencies on program-level issues in order to streamline the permitting process and better protect resources</p>	SWRCB	Statewide	Formalized agreements	7/1/03 to 6/30/08
Implement 4.075	Manage contract on Fish Passage Improvement	<p><b>Objective:</b> Oversee contract on Fish Passage Improvement Project</p> <p><b>Description:</b> Oversight of grant to improve fish passage on Apanolio Canyon Creek</p>	RWQCB-2	San Mateo County	Project completion	7/1/03 to 12/31/05
Implement 4.076-2	Manage contract for STRAW program	<p><b>Objective:</b> Oversee contract for school-based program to teach students about watersheds and to Implement revegetation projects along creeks.</p> <p><b>Description:</b> Student projects to do revegetation projects on a variety of urban and rural creeks in Marin and Sonoma Counties</p>	RWQCB-2	Marin and Sonoma Counties	Completed revegetation projects, completed classroom training	7/1/03 to 12/31/05

**Table VIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 6.018	Malibu Lagoon Water Quality and Habitat Enhancement	<p><b>Objective:</b> To restore the lagoon and enhance circulation and water level control to improve water quality both in lagoon and along coast which are impaired for coliform.</p> <p><b>Description:</b> Restore lagoon and enhance circulation and water level control to improve water quality both in lagoon and along coast which are impaired for coliform. Several endangered species utilize lagoon. Has support of a large stakeholder group. Conceptual design work being funded by Coastal Conservancy under another grant.</p>	RWQCB-4	Los Angeles County	Restored lagoon	7/1/03 to 6/30/08
Implement 6.029	Upper SCR Watershed Arundo Donax & Tamarisk Eradication Pgrm	<p><b>Objective:</b> To establish an eradication program and demonstrate measurable riparian habitat improvements as the project progresses.</p> <p><b>Description:</b> Exotics removal project that includes mapping, monitoring, long-term planning, site assessment, and outreach. Large geographic area will be covered. Project will help restore watershed, improve facultative filtration, remove large trash components in stream runoff, and improve groundwater recharge. Large stakeholder group with commitment to main results.</p>	RWQCB-4	Ventura County	Established eradication program	7/1/03 to 6/30/08



**Table VIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 6.070	R4-2002-0001 Tosco Refining Co. SEP - Bramble Restoration	<p><b>Objective:</b> The goal of the SEP is to improve the native habitat for indigenous species, control unauthorized entry and access to sensitive areas in the park and restore aesthetic, riparian and riverine quality in Ken Malloy Regional Park.</p> <p><b>Description:</b> Bramble Restoration Project at Ken Malloy Regional Park. Regional Board staff will overlook the SEP project to ensure milestones and goals are met through regular reports submitted to RB staff by the SEP Proponent/Manager. Reports will discuss the project's standing and what goals, milestones, problems etc. the project has faced during its implementation.</p>	RWQCB-4	Ken Malloy Regional Park Wetland	Restored Ken Mallory Park	5/1/03 to	1/1/04
Implement 6.071	Res. No.02-007 City of Santa Clarita-Bouquet Creek SEP	<p><b>Objective:</b> The City will restore a section of Bouquet Creek that flows through Central Park. The proposed project has three goals: preserve the natural riparian habitat existing in Bouquet Creek by developing an ongoing conservation plan; enhance water quality through enhanced infiltration, percolation and recharge; and develop a public outreach component to educate the community regarding the local hydrological cycle as well as biota existing in Bouquet Creek.</p> <p><b>Description:</b> Bouquet Creek Restoration. Regional Board staff will overlook the SEP project to ensure milestones and goals are met through regular reports submitted to RB staff by the SEP Proponent/Manager. Reports will discuss the project's standing and what goals, milestones, problems etc. the project has faced during its implementation.</p>	RWQCB-4	City of Santa Clarita	Conservation Plan, Education and Outreach Program	7/1/03 to	6/30/08
Track/Monitor 4.072-2	Wetlands: Baylands Wetlands Projects review	<p><b>Objective:</b> Modification of projects within or near Baylands in conformance with Regional Wetland Goals.</p> <p><b>Description:</b> Review of projects, monitor mitigation efforts</p>	RWQCB-2	Regionwide RB2	Project reviews, regional plans, staff trainings	7/1/03 to	12/31/08

**Table VIIB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Track/Monitor 4.074	Wetland Assessments	<p><b>Objective:</b> Assessments of wetland mitigation projects in terms of permit compliance and success of restoration attempts.</p> <p><b>Description:</b> Develop assessment tool for wetland mitigation projects in terms of permit compliance and successful habitat restoration</p>	RWQCB-2	Regionwide	Development of assessment tool	7/1/03 to 12/31/04
------------------------	---------------------	--	---------	------------	--------------------------------	--------------------

**Management Measure: 6C Vegetated Treatment Systems**

Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Pre-Implementation 2.507-2	Compliance Monitoring	<p><b>Objective:</b> Establish consistent compliance monitoring criteria for compensatory mitigation projects.</p> <p><b>Description:</b> Develop compliance monitoring criteria for compensatory mitigation projects.</p>	SWRCB	Statewide	Compensatory mitigation projects are monitored consistently	7/1/03 to 6/30/08

**Table VIIB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: 6D Education/Outreach</b>						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 4.045-2	TMDL for Dissolved Oxygen, Suisun Marsh	<b>Objective:</b> Develop and implement TMDL  <b>Description:</b> Develop and implement TMDL for Suisun Marsh	RWQCB-2	Solano County	Completed TMDL and Basin Plan amendment	1/1/04 to 6/30/08
Pre-Implementation 4.071-2	Wetland Planning Activities Participation	<b>Objective:</b> Participate in regional wetland planning activities, development of regional initiatives  <b>Description:</b> Regional Board staff participation in planning activities such as Bay Area Wetlands Restoration and Joint Venture Group.	RWQCB-2	Regionwide RB2	Joint planning and implementation activities	7/1/03 to 12/31/08
Pre-Implementation 4.083-3	Manage contract on citizen monitoring & assessment	<b>Objective:</b> Oversee contract for Contra Costa citizen watershed monitoring and assessment program  <b>Description:</b> This project will include bioassessment workshops, citizen monitoring, creek surveys	RWQCB-2	Contra Costa County	Creek surveys and bioassessments	7/1/03 to 12/31/05
Implement 11.63	National Wetlands Month Project	<b>Objective:</b> To develop a teacher tool box and curriculum for National Wetlands Month activities for K-5 grade  <b>Description:</b> outreach and education, develop tool box and curriculum.	RWQCB-6	El Dorado County	Completed tool box and curriculum being utilized.	1/1/03 to 1/1/05

**Table VIIB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 16.601-3	Wetlands Recovery Project	<p><b>Objective:</b> To provide input into the Southern California Wetlands Recovery Project.</p> <p><b>Description:</b> Active participation in Southern California Wetlands Recovery Project, including Wetlands Managers Group, San Diego County Wetlands Task Force and Orange County Wetlands Task Force.</p>	RWQCB-9	Regionwide - Region 9	Protection and restoration of water quality and beneficial uses.	7/1/03 to 6/30/08
Implement 16.602-3	Wetlands Advisory Board	<p><b>Objective:</b> To provide input into the city of San Diego Wetlands Advisory board..</p> <p><b>Description:</b> To activity participate in the city of San Diego Wetlands Advisory Board.</p>	RWQCB-9	Regionwide - Region 9	complete participation in the City of San Diego Wetlands Advisory Board activities.	7/1/03 to 6/30/08
Implement 2.500-3	Develop technical assistance guidance manual	<p><b>Objective:</b> Assist local governments and small business with guidelines</p> <p><b>Description:</b> Develop a technical assistance manual that will assist local governments and small business with guidelines for designing projects to avoid wetlands and riparian areas.</p>	SWRCB	Statewide	Developed manual	7/1/03 to 6/30/08
Implement 2.502	Provide education and publications.	<p><b>Objective:</b> Conserve, restore and enhance wetland and riparian resources.</p> <p><b>Description:</b> Increase educational efforts and provide information/publications identifying the need to and how to conserve, restore and enhance wetland and riparian resources.</p>	SWRCB	Statewide	Information is disseminated and adverse impacts are reduced	3/30/03 to 6/30/08

**Table VIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 2.506-3	Establish Formal Agreements	<p><b>Objective:</b> Establish formal agreements to streamline the permitting process and better protect resources.</p> <p><b>Description:</b> Establish formal agreements between agencies on program-level issues in order to streamline the permitting process and better protect resources</p>	SWRCB	Statewide	Formalized agreements	7/1/03 to 6/30/08
Implement 4.076-1	Manage contract for STRAW program	<p><b>Objective:</b> Oversee contract for school-based program to teach students about watersheds and to Implement revegetation projects along creeks.</p> <p><b>Description:</b> Student projects to do revegetation projects on a variety of urban and rural creeks in Marin and Sonoma Counties</p>	RWQCB-2	Marin and Sonoma Counties	Completed revegetation projects, completed classroom training	7/1/03 to 12/31/05
Track/Monitor 4.072-3	Wetlands: Baylands Wetlands Projects review	<p><b>Objective:</b> Modification of projects within or near Baylands in conformance with Regional Wetland Goals.</p> <p><b>Description:</b> Review of projects, monitor mitigation efforts</p>	RWQCB-2	Regionwide RB2	Project reviews, regional plans, staff trainings	7/1/03 to 12/31/08

**Table VIIB  
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

<b>Management Measure: All- w</b> All Wetlands Measures						
<b>Process Element</b>	<b>Activity Name</b>	<b>Activity Objective and Description</b>	<b>Agency</b>	<b>Location</b>	<b>Success Criteria</b>	<b>Schedule</b>
Pre-Implementation 15.004	Coordinate wetlands-related projects in Southern California	<p><b>Objective:</b> Coordinate wetlands-related projects in Southern California with the work of the wetlands recovery project.</p> <p><b>Description:</b> Coordinate wetlands-related projects in Southern California with the work of the wetlands recovery project. Include projects in WRP database. This is an ongoing effort that has no end date. High quality work is being produced, with various stressors being addressed.</p>	RWQCB-8	Southern California	Coordinated wetlands projects; Projects included in WRP database.	7/1/03 to 6/30/08
Pre-Implementation 15.007	Include Wetlands in Basin Plan	<p><b>Objective:</b> Bring Wetlands into the Planning Process by including them in the Basin Plan.</p> <p><b>Description:</b> Bring Wetlands into the Planning Process by including them in the Basin Plan.</p>	RWQCB-8	Regionwide RB8	Bring Wetlands into the Planning Process by including them in the Basin Plan.	7/1/03 to 6/30/08
Pre-Implementation 6.025	City of LA Augustus B. Hawkins Wetlands Habitat	<p><b>Objective:</b> The proposed project is to demonstrate to a highly urbanized community the effectiveness of wetland habitats in meeting the new requirements.</p> <p><b>Description:</b> Construct a freshwater marsh system with native vegetation in Hawkins park to capture and treat urban runoff and provide wildlife habitat. Will also serve flood control purposes. Multiple impairments in the LA River will be addressed. There is an existing trash TMDL and a nutrient TMDL is in development.</p>	RWQCB-4	Los Angeles County	Completed marsh system	7/1/03 to 6/30/08

**Table VIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 5.601	Assist wetlands & riparian project evaluation for impacts	<p><b>Objective:</b> Prevent water quality impacts associated with wetlands activities</p> <p><b>Description:</b> Review and comment on proposed wetlands activities, activities performed through Regional Board's 401 Water Quality Certification program.</p>	RWQCB-3	Regionwide RB3	Adequately conditioned wetlands projects	7/1/03 to 6/30/08
Implement 2.500	Technical assistance guidance manual and CEQA Appendix	<p><b>Objective:</b> Assist Regional Board staff and local governments and small business in evaluating projects to avoid adverse impacts to wetlands and riparian areas</p> <p><b>Description:</b> Develop a technical assistance manual and CEQA Guidelines Appendix for project design that will include guidelines for designing projects to avoid impacts to wetlands and riparian areas. Adopt Waste Discharge Requirements that prescribe channel maintenance activities with minimal threat to water quality.</p>	SWRCB	Statewide	Manual and CEQA Guidelines Appendix developed and approved	7/1/03 to 6/30/08
Implement 2.503	Develop Management Practices Guidance	<p><b>Objective:</b> Reduce NPS pollution impacting wetlands and riparian areas.</p> <p><b>Description:</b> Develop Guidance on management practices that can be implemented for activities potentially impacting wetlands, riparian areas, and vegetated treatment systems to help reduce NPS pollution impacting water quality. Practitioners will use Guidance to avoid potential adverse impacts to wetlands, riparian areas and vegetated treatment systems.</p>	SWRCB	Statewide	Effective use of guidance	3/1/03 to 11/30/03
Implement 2.504	Ensure compliance with CEQA and Porter-Cologne Act	<p><b>Objective:</b> Ensure compliance with CEQA and Porter-Cologne Act</p> <p><b>Description:</b> Ensure compliance with CEQA and Porter-Cologne Act when certifying nationwide permits.</p>	SWRCB	Statewide	Activities covered by nationwide permits are in compliance.	7/1/03 to 6/30/08

**Table VIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 2.505	Develop technical assistance and training programs	<p><b>Objective:</b> Provide guidance for designing projects to avoid wetlands and riparian areas.</p> <p><b>Description:</b> Develop a technical assistance and training program for project design that will include guidelines for designing projects to avoid wetlands and riparian areas. This will include BMPs, model ordinance provisions and methods of establishing setbacks.</p>	SWRCB	Statewide	Developed guidance and training, model ordinance provisions, methods of establishing setbacks.	7/1/03 to 6/30/08
Implement 2.508	Develop CEQA Guidelines	<p><b>Objective:</b> Develop CEQA guidelines for wetlands and watershed analysis</p> <p><b>Description:</b> Develop CEQA guidelines for wetlands and watershed analysis, such as an appendix to CEQA Guidelines.</p>	SWRCB	Statewide	CEQA guidelines developed	7/1/03 to 6/30/08
Implement 2.509	Provide Financial Assistance	<p><b>Objective:</b> Provide financial assistance</p> <p><b>Description:</b> Provide financial assistance to encourage environmentally friendly floodplain management.</p>	SWRCB	Statewide	Funding provided to projects	7/1/03 to 6/30/08
Implement 2.510	Provide incentives for flood management approaches	<p><b>Objective:</b> Minimize the need for channelization and channel hardening.</p> <p><b>Description:</b> Provide incentives for flood management approaches that minimize the need for channelization and channel hardening.</p>	SWRCB	Statewide	Regulatory flexibility; Expedited permit review; Waived or reduced fees	7/1/03 to 6/30/08



**Table VIIB**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 2.511	Provide technical training	<p><b>Objective:</b> Train Regional Board and Local Agency staff</p>	SWRCB	Statewide	Well-trained Regional Board and Local Agency staffs	9/1/03 to	9/30/03
		<p><b>Description:</b> Provide training to Regional Board and Local Agency staffs to ensure projects are designed to avoid impacts to wetlands and riparian area</p>					
Implement 3.09	Wetlands review	<p><b>Objective:</b> Ensure that projects involving wetlands disturbance comply with all applicable water quality standards.</p>	RWQCB-1	Regionwide RB1	Basin Plan compliance	7/1/98 to	6/30/08
		<p><b>Description:</b> review project plans/applications; inspect; determine appropriate regulatory action(s); monitor</p>					

**SECTION VIII  
OTHER ACTIVITIES  
FIVE-YEAR NPS IMPLEMENTATION PLAN  
July 2003 through June 2008**

Some activities that will be taking place in California address NPS pollution sources do not conform to the descriptions of the six basic Land Use Categories. These activities are listed in this Section, and include activities related to abandoned mines, marine native plant restoration and marine invasive species eradication.

**A. ABANDONED MINE ISSUES OF CONCERN**

EPA and NOAA did not specify MMs for abandoned mines, however abandoned mine drainage and runoff are significant sources of pollution to waters in California, and must be addressed. The SWRCB is the lead agency for control of water pollution by any source, including abandoned mines. However, there is no specific, comprehensive program at either a State or federal level for cleaning up abandoned and inactive non-coal mines. Rather, abandoned and inactive mine remediation, when carried out at all, falls under a variety of State and federal programs. A few mine remediations have been carried out under the federal Superfund Program which addresses only the most extreme pollution sites, such as Iron Mountain Mine. Federal land management agencies have specific, marginally funded programs for cleaning up abandoned mines on federal land but most projects address safety hazards rather than water quality. Abandoned mine clean ups have been pursued as enforcement actions under California's Title 27 Program which regulates discharges of wastes to land. Enforcement actions, however, are costly in terms of state resources and haven't been effective because responsible parties are difficult to locate and current property owners either do not have, or will not spend money, to clean up their sites.

In the near future, abandoned mine remediation may be accomplished by counties and other local entities that work in partnership with federal agencies. Local entity efforts may be supported by grants from State bond proposals. As yet, however, this potential partnership remains untested.

The remnants of mining activity that took place since 1849 left California with literally tens of thousands of small, abandoned "hardrock" mines. Although not significant polluters individually, they often contribute cumulatively to chronic toxicity in affected watersheds via metals loading. Similarly, abandoned hydraulic placer gold mines and abandoned aggregate mines degrade aquatic habitat via excessive sediment loading. The most serious sites are usually addressed directly through the issuance of WDRs. However, the cumulative effects of smaller sites are not yet documented.

A 1980's gold rush resulted in the appearance of "new" abandoned mines. These mines were permitted under state programs but, for a variety of reasons, they still degrade or threaten to degrade waters of the state. The companies that owned these sites have been dissolved and the owners are not possible to locate.

The main barriers to a state level, comprehensive program for cleaning up abandoned mines are liability and funding. Under the federal CWA, a third party can sue an agency or private party that performs abatement work at an abandoned mine if the discharge from the mine continues to violate the CWA. California recently passed legislation that provided protection for "Good Samaritan" cleanups under State law. Efforts over the last few years to amend federal law to provide similar protection; however, have failed thus far. Thus, liability is a major barrier to a comprehensive program for cleaning up abandoned mines. Additionally, there remains the problem of funding. Federal land management agency programs for cleaning up abandoned mines are hamstrung by lack

of funding, more so than liability.

## **B. MARINE NATIVE PLANT RESTORATION**

There is one activity listed under this Section – Kelp restoration work at sites located along the Malibu coastline to the Santa Monica Bay, to return kelp populations to where they once existed.

## **C. MARINE INVASIVE SPECIES CONTROL**

There is one activity listed under this Section – Caulerpa taxifolia eradication and prevention.

## **D. ABANDONED MINES AND THEIR RELATION TO OTHER SWRCB PROGRAMS**

### **1. Waste Discharge Requirements**

RWQCBs have issued WDRs to property owners of abandoned mines. However, the current regulatory scheme implicitly assumes that the permitted activity is revenue generating and thus, permit compliance is a business cost. This is not the case for abandoned mines and thus, property owners often cannot or will not comply with permit conditions. Moreover, most current property owners neither owned, nor operated the now abandoned mines which were in production during years prior to the CWC. Although issuing WDRs is important step in establishing a record of attempted enforcement, enforcement efforts against private property owners have been largely futile.

### **2. NPDES Permits**

RWQCBs have also issued NPDES permits to property owners of abandoned mines. Progress has been made at sites where the NPDES permit holder has been a state agency or corporation. However, for the same reasons stated above, private property owners often do not comply with their NPDES permit conditions.

### **3. Impaired 303(d) Lists and TMDLs**

Under Section 303(d) of the Clean Water Act, California is required to compile a list of impaired waters that fail to meet applicable water quality standards or that cannot support their designed beneficial uses. This list, called a '303(d)' list is submitted to Congress every two years, and California is required to develop a Total Maximum Daily Load (TMDL) for each pollutant causing impairment to the water bodies that are listed. The 2002 303(d) list contains 103 (15%) water bodies that are listed under the category "resource extraction". This number includes water bodies impaired from abandoned mine runoff.

## **E. ACTIVITY SUMMARY**

The activities that are being pursued by State Agencies for the period from July 2003 through June 2008 specifically addressing problems associated with Abandoned Mines are listed in Table VIII, below. In addition, activities being pursued by RWQCBs related to marine native plant restoration and marine invasive species eradication are listed.

**Table VIII B**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

**Other**

**Management Measure:** N/A To Be Determined

Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Pre-Implementation 10.022	Delta Mercury TMDL	<p><b>Objective:</b> Reduce mercury in the delta.</p> <p><b>Description:</b> TMDL is scheduled to be completed by 2003. The Basin Plan Amendment is scheduled to go to the Board in 2004. Implementation is scheduled to start in 2006. More information at: <a href="http://www.swrcb.ca.gov/~rwqcb5/programs/mdl/deltahg.html">http://www.swrcb.ca.gov/~rwqcb5/programs/mdl/deltahg.html</a></p>	RWQCB-5S	Delta	Completed TMDL and Basin Plan Amendment.	7/1/03 to 6/30/08
Pre-Implementation 10.024	Harley Gulch TMDL	<p><b>Objective:</b> Reduce mercury in Harley Gulch.</p> <p><b>Description:</b> TMDL scheduled to be completed in 2003. Basin Plan Amendment scheduled to go to the Board in 2004. Implementation scheduled to begin in 2006. More information at: <a href="http://www.swrcb.ca.gov/~rwqcb5/programs/mdl/harley_gulch/index.html">http://www.swrcb.ca.gov/~rwqcb5/programs/mdl/harley_gulch/index.html</a></p>	RWQCB-5S	Lake County	Completed TMDL and Basin Plan Amendment.	7/1/03 to 6/30/08
Pre-Implementation 10.025	Sulphur Creek TMDL	<p><b>Objective:</b> Reduce mercury in Sulphur Creek.</p> <p><b>Description:</b> TMDL scheduled to be completed in 2003. Basin Plan Amendment scheduled to go to the Board in 2004. Implementation scheduled to begin in 2006. More information at: <a href="http://www.swrcb.ca.gov/~rwqcb5/programs/mdl/sulphur_creek/index.html">http://www.swrcb.ca.gov/~rwqcb5/programs/mdl/sulphur_creek/index.html</a></p>	RWQCB-5S	Colusa County	TMDL and Basin Plan Amendment	7/1/03 to 6/30/08

**Table VIII B**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 10.026	Bear Creek TMDL	<p><b>Objective:</b> Reduce mercury in Bear Creek.</p> <p><b>Description:</b> TMDL scheduled to be completed in 2004. Basin Plan Amendment scheduled to go to the Board in 2005. Implementation scheduled to begin in 2007. More information at: <a href="http://www.swrcb.ca.gov/~rwqcb5/programs/tmdl/bear_creek/index.html">http://www.swrcb.ca.gov/~rwqcb5/programs/tmdl/bear_creek/index.html</a></p>	RWQCB-5S	Colusa County	TMDL and Basin Plan Amendment	7/1/03 to	6/30/08
Pre-Implementation 10.027	Sacramento River TMDL	<p><b>Objective:</b> Reduce mercury in the Sacramento River</p> <p><b>Description:</b> TMDL scheduled to be completed in 2006. Basin Plan Amendment scheduled to go to the Board in 2007. Implementation scheduled to begin in 2008.</p>	RWQCB-5S	Regionwide RB5	TMDL and Basin Plan Amendment	7/1/03 to	6/30/08
Pre-Implementation 10.084	Restoring Deer Creek	<p><b>Objective:</b> Restore Deer Creek impairment from historic gold mining</p> <p><b>Description:</b> Restoring Deer Creek builds on the existing effort with three major components: 1) understanding the river and connecting river monitoring to land management issues; 2) reducing point and non-point source inputs to the stream; and 3) restoring targeted river reaches.</p>	RWQCB-5S	Yuba River Watershed	Restored creek	7/1/03 to	6/30/08
Pre-Implementation 11.33	Bodie Creek TMDL	<p><b>Objective:</b> Bodie Creek watershed restoration through the TMDL program</p> <p><b>Description:</b> Complete and implement the TMDL</p>	RWQCB-6	Mono County	completed TMDL	1/1/02 to	1/1/05

**Table VIII B**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 11.66	Abandoned Mine Survey	<p><b>Objective:</b> Assess acid mine impacts in Alpine County</p> <p><b>Description:</b> survey and sample. Survey each mine for AMD impacts, obtain water quality samples where indications of AMD are present. Collaborate with the USFS to share results.</p>	RWQCB-6	Alpine County	Water quality improvement in East Fork Carson River	7/1/03 to 6/30/08
Pre-Implementation 2.600	Zaca Mine	<p><b>Objective:</b> Affect a clean up of acid mine drainage, remove potentially toxic mine waste from monitor creek, and reduce toxic sediment erosion rates at the Zaca Mine and other small mines in the vicinity.</p> <p><b>Description:</b> Region 6 staff are working with USF staff on assessing the scope of pollution at the sites and evaluating potential remedies for specific pollution issues. SWRCB staff provides technical support to regional board staff in areas of review, site characterization, and mine entry. Cleanup work will be performed by the USF as a non-time critical CERCLA action.</p>	SWRCB	Sierra Nevada, Alpine County	End or reduce to minimal levels, acid discharge to Monitor Creek. Reduce sediment discharge from mine sites.	7/1/03 to 6/30/08
Pre-Implementation 2.603	Pioneer Pit and Gardners Point Mines	<p><b>Objective:</b> Assist in forming and participate in a local/state/federal team to address sediment and metal loading from these recently abandoned gold mines.</p> <p><b>Description:</b> Participants have met and agreed to: pursue recovery of any reclamation bond funds, establish a record of non-compliance with state regulatory programs, update the approved reclamation plan, and recommend that the DA prosecute the owner operator. My role is that of an agency contact, technical consultant.</p>	SWRCB	Northern Sierra Nevada	Reduced loadings	7/1/03 to 6/30/08

**Table VIII B**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 2.604	Brush Creek Mine	<p><b>Objective:</b> To bring the recently abandoned mine into compliance with all pending permits, orders, and it's reclamation plan</p> <p><b>Description:</b> Compile a permit list, determine if the reclamation bond for the site exists. My role is that of an agency contact.</p>	SWRCB	Northern Sierra Nevada	Compliance with reclamation plan	7/1/03 to 6/30/08
Pre-Implementation 2.605	Mclaughlin Mine	<p><b>Objective:</b> Open the McLaughlin Mine reclamation plan for modification</p> <p><b>Description:</b> Because closure conditions have changed from those anticipated when the plan was approved. Provide technical consultation for review of current site conditions with DOC and Regional Board staff to determine if reclamation goals need recasting in light of current conditions.</p>	SWRCB	Napa County	Overview of site environmental liabilities	7/1/03 to 6/30/08
Pre-Implementation 2.607	Bear River Mercury Study	<p><b>Objective:</b> Document the factors that control mercury methylation within the foodweb of Camp Far West Reservoir on the Bear River</p> <p><b>Description:</b> Serve as contract manager for a study of the reservoir's food web, sediment, and water quality to determine what factors (e.g., temperature, nutrients, etc) cause mercury methylation. Study is an outgrowth of an earlier Bear River Mercury loading study completed by the USGS that resulted in a fish consumption advisory for Camp Far West Reservoir.</p>	SWRCB	Nevada County	An understanding of causes of mercury methylation in an aquatic environment.	7/1/03 to 6/30/08
Pre-Implementation 2.610	Sierra Trinity mercury group	<p><b>Objective:</b> Promote watershed characterization and abatement of damage caused by mining on federal land (mercury)</p> <p><b>Description:</b> Corridinated interagency effort to characterize watersheds on federal land degraded by mining. Pilot clean up projects are in the planning state.</p>	SWRCB	Trinity River and Sierra Nevada Watersheds	Watershed characterized and sites cleaned up.	7/1/03 to 6/30/08

**Table VIII B**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 2.613	Pollution trading effort	<p><b>Objective:</b>  Define an equitable pollution trading scheme for mercury from the discharge of the Sacramento County Regional Sanitation District facility</p> <p><b>Description:</b>  Work as part of a state and regional board team to determine what, from the agency's point of view in the context of an NPDES permit, would constitute a fair pollution trade of upstream, point and non-point mercury sources. The district is facing a costly upgrade of their facility to meet pending mercury discharge limits. They would prefer not to have to make those upgrades for what they perceive as little benefit at great cost. Hence, they are sponsoring an effort to develop an equitable trade which would involve cleaning up sources upstream of their facility that are identified as damaging to the aquatic system. Some of these remedies are likely to focus on nonpoint source discharges from urban areas.</p>	SWRCB	Sacramento River Watershed	Finalized Agreement	7/1/03 to 6/30/08
Pre-Implementation 27.003	California Abandoned Mine Lands Task Force	<p><b>Objective:</b>  Convene a statewide discussion group to discuss and make recommendations on technical and legal issues that inhibit effective abandoned mine remediation</p> <p><b>Description:</b>  Discussion of abandoned mine remediation issues, with participation by other state and federal agencies. Develop recommendations on issues affecting abandoned mine reclamation.</p>	DOC	Sacramento	Effective participation and recommendations	1/1/03 to 6/30/08
Pre-Implementation 27.004	Abandoned Mine Inventory Work	<p><b>Objective:</b>  Develop an abandoned mine inventory that is assessed and ranked by priority of hazard.</p> <p><b>Description:</b>  Field inventory work and database management.</p>	DOC	Statewide	Completion of inventory work in priority watersheds.	7/1/03 to 6/30/08



**Table VIII B**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Pre-Implementation 4.088	TMDL for Mercury, Tomales Bay	<b>Objective:</b> Develop TMDL for mercury  <b>Description:</b> Develop TMDL for mercury, address sediment pollutant issues and fish contamination in Tomales Bay	RWQCB-2	Marin County	Reports and BP amendment	7/1/05 to	2/28/07
Pre-Implementation 8.0010	San Carlos Creek Mercury TMDL	<b>Objective:</b> Begin mercury TMDL development in 2004  <b>Description:</b> Begin mercury TMDL development in 2004. Basin Plan amendment will be during the next 5 year plan	RWQCB-5F	San Carlos Creek	TMDL stakeholder group formation and monitoring	7/1/03 to	6/30/08
Pre-Implementation 8.007	Panoche Creek Mercury TMDL	<b>Objective:</b> Begin mercury TMDL development  <b>Description:</b> Mercury TMDL development to begin 2004. Basin Plan amendment will be during next 5 year plan.	RWQCB-5F	Panoche Creek	TMDL stakeholder group development and monitoring	7/1/03 to	6/30/08
Implement 10.004	SRWP Delta Tributaries Mercury Council	<b>Objective:</b> Implement the Delta Tributaries Mercury Council strategic plan.  <b>Description:</b> Assist in identifying and obtaining resources to implement the plan.	RWQCB-5S	Sacramento River Watershed	Resources are acquired for implementation	7/1/03 to	6/30/08
Implement 10.021	Clear Lake Mercury TMDL	<b>Objective:</b> Reduce mercury levels in Clear Lake.  <b>Description:</b> Implement the mercury TMDL for Clear Lake. More information at: <a href="http://www.swrcb.ca.gov/~rwqcb5/programs/tmdl/clearlake.html">http://www.swrcb.ca.gov/~rwqcb5/programs/tmdl/clearlake.html</a>	RWQCB-5S	Lake County	Implementation plan	7/1/03 to	6/30/08

**Table VIII B**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 10.087	Abandoned Mine Reclamation and Restoration	<p><b>Objective:</b> Reduce impacts of abandoned mines, restore ecological health and improve water quality in the north Yuba Watershed.</p> <p><b>Description:</b> Eight individual sites are impacted by previous historic mining activities. Project implementation involves removal of structures, abandoned equipment and materials (including hazardous materials), recontouring disturbed landscapes, stabilizing stream banks, and revegetating the sites. Access roads will be decommissioned and revegetated where appropriate. Where necessary, individual site characterization studies will be conducted to determine the extent of toxic discharge from mine openings and to prescribe the appropriate alternative for remediation.</p>	RWQCB-5S	Yuba River watershed	Implementation of BMPs.	7/1/03 to 6/30/08
Implement 11.60	Colorado Hill Mining District Oversight	<p><b>Objective:</b> Meet water quality standards in Monitor Creek and E. Fork Carson River</p> <p><b>Description:</b> stop acid mine discharges to Monitor Creek and stabilize/remove tailings in creek</p>	RWQCB-6	Alpine County	implement remedial actions	7/1/03 to 6/30/08
Implement 16.001	Caulerpa taxifolia (CT) eradication and prevention	<p><b>Objective:</b> This action includes efforts to find, eradicate, and prevent infestations of Ct, including work in support of such efforts.</p> <p><b>Description:</b> 1: Eradicate known infestations of Ct, 2. Find and eradicate any other existing infestations of Ct, 3. Prevent new infestations of Ct.' 4. Find and eradicate any new infestations of Ct.</p>	RWQCB-9	California coast	Eradication of Ct	7/1/03 to 6/30/08

**Table VIII B**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 19.005	Reforestation of Hydraulically-Mined Areas in Nevada County	<p><b>Objective:</b> Reforest hydraulically-mined areas using recycled organic materials as a growing substrate for native vegetation.</p> <p><b>Description:</b> Utilize biosolids/compost blend to reforest hydraulically-mined areas to reduce erosion of contaminated soils into local watersheds.</p>	CIWMB	Nevada County	Reduction in contaminated runoff from hydraulically-mined areas and regeneration of native plant species in disturbed soils.	12/1/02 to 12/1/05
Implement 2.601	Clear Creek streambed habitat restoration	<p><b>Objective:</b> Restore streambed habitat using dredge tailings from historic goldmining located within the floodplain.</p> <p><b>Description:</b> Provide technical consultation to determine and implement methods to minimize mercury release from the dredger tailing prior to the use to make up a sediment deficiency. Since the restoration project was ongoing when the mercury issue became known, the remedial action was added as an additional task.</p>	SWRCB	Central Valley, Redding area	Removal of mercury containing fine fraction of the tailings by washing.	7/1/03 to 6/30/08
Implement 2.602	East Shasta and West Shasta abandoned mines	<p><b>Objective:</b> Reduce acid and metal loading to West Squaw Creek, Little Backbone Creek, and Town Creek which all flow into Shasta Lake and have cause fish kills</p> <p><b>Description:</b> Reduction of acid loads by diverting stream around mined areas, local capping and mine sealing, and removing acid generating mine waste. My role is as an occasional technical consultant.</p>	SWRCB	Shasta Lake	No fish kills in Shasta Lake from tributaries	7/1/03 to 6/30/08
Implement 27.002	Physical Hazard Remediation on AML Sites	<p><b>Objective:</b> Mitigate physical hazards at abandoned mine sites</p> <p><b>Description:</b> Install bat gates, backfill, PUF close, fence, and otherwise remediate physical hazards at AML sites.</p>	DOC	Statewide	Mitigated hazards	9/5/02 to 6/30/08

**Table VIII B**  
**ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES**

Implement 6.074	Res. No. 02-007 SEP List SMBK - Kelp Restoration Project	<p><b>Objective:</b> The program's objectives are to: expand the BayKeeper's kelp restoration work to three additional sites along the Malibu coastline to the Santa Monica Bay.</p> <p><b>Description:</b> Kelp restoration activities will consist of: 1. returning kelp populations to where they once existed; 2. transplanting fertile drift kelp to act as a natural spore source to the area; 3. selecting three restoration sites based on historical kelp coverage to date; and 4. monitoring of the sites during all phases of restoration.</p>	RWQCB-4	Santa Monica	Kelp restoration in targeted sites	7/1/03 to	6/30/08
Track/Monitor 27.007	Monitoring Spenceville Mine Restoration and Closure	<p><b>Objective:</b> Design, complete and monitor reclamation of Spenceville Mine.</p> <p><b>Description:</b> Assist DFG in the development, implementation and monitoring of reclamation of acid mine drainage. Complete mined land reclamation to second use; Monitor stream restoration for elimination of Acid Mine Drainage (AMD).</p>	DOC	Nevada County	Mine closure and restoration	1/1/90 to	4/1/07
Report 2.612	Delta Tributaries Mercury Committee	<p><b>Objective:</b> Promote a sound strategy for dealing with mercury in aquatic systems</p> <p><b>Description:</b> The committee grew out of the Cache Creek watershed initiative which began in the mid- 1990's as mercury is a prime concern in the watershed but affects downstream areas as well. Develop a report which lays out a strategy for evaluating mercury in aquatic systems.</p>	SWRCB	West Sacramento Valley	Finished report	7/1/03 to	6/30/08

**APPENDIX I**  
**LIST OF ACRONYMS**

**APPENDIX I**  
**LIST OF ACRONYMS**

**A**

ACOE – Army Corp of Engineers  
ASBS – Areas of Special Biological Significance

**B**

BASMAA – Bay Area Stormwater Management Agencies Association  
BCDC – San Francisco Bay Conservation Development Commission  
BIOS – Biologically Integrated Orchard Systems  
BLM – Bureau of Land Management  
BMP – Best Management Practice  
BOF – Board forestry

**C**

CAC – County Agriculture Commissioners  
CAF – Confined Animal Facility  
CAFO – Confined Animal Feeding Operations  
CAG – Compliance Assistance Guidance  
CalFED – California Bay Delta Authority  
CAL/EPA – California Environmental Protection Agency  
Cal/RA – California Resources Agency  
Cal/Trans – California Department of Transportation  
CAMMPR – California Management Measures for Polluted Runoff  
CARB – California Air Resources Board  
CBDA – California Bay Delta Authority  
CCA – Critical Coastal Area  
CCBN – California Clean Boating Network  
CCC – California Coastal Commission  
CCMP – Comprehensive Conservation and Management Plan  
CCR – Code of California Regulations  
CDF – California Department of Forestry and Fire Protection  
CDPR – California Department of Pesticide Regulation  
CEQA – California Environmental Quality Act  
CIWMB – California Integrated Waste Management Board  
CRMP – Coordinated Resource Management and Planning Program  
CSLC – California State Lands Commission  
CVA – Clean Vessels Act (Federal)  
CWA –Federal Clean Water Act  
CWC – California Water Code  
CWT – SWRCB Clean Water Team  
CZRA – Coastal Zone Act Reauthorization Amendments of 1990

**D**

DBW – Department of Boating and Waterways  
DFG – Department of Fish and Game

DHS – Department of Health Services  
DO – Dissolved Oxygen  
DOC – Department of Conservation  
DOF – Department of Forestry  
DOT – Department of Transportation  
DPR – Department of Parks and Recreation  
DTSC - Department of Toxic Substances Control  
DWR – Department of Water Resources

E

EA – Environmental Assessment  
EIR – Environmental Impact Report  
EIS – Environmental Impact Statement  
EMAP – Environmental Monitoring and Assessment Program

F

FHWA – Federal Highway Administration  
FPR – Forest Practice Rules  
FY – Fiscal Year

G

GeoWBS – Geospatial Waterbody System  
GIS – Geographic Information System  
GPS – Global Positioning System

H

I

IACC – Interagency Coordinating Committee  
ICE – Information Center for the Environment

J

K

L

LCP – Local Coastal Program

M

MAA – Management Agency Agreement  
MBNMS – Monterey Bay National Marine Sanctuary  
MM – Management Measure  
MOU – Memorandum of Understanding  
MP – Management Practice  
MSD – Marine Sanitation Device

N

NEPA – National Environmental Policy Act  
NMFS – National Marine Fisheries Services

NMP – Nutrient Management Plan  
NOAA – National Oceanic and Atmospheric Administration  
NPDES – National Pollutant Discharge Elimination System  
NPS – Nonpoint Source  
NRCS – National Resources Conservation Service  
NRPI – National Resources Project Inventory

O

OP – Organophosphate Pesticides  
OPA – Oil Pollution Act  
OSDS – On-site Disposal System

P

PAG – Public Advisory Committee  
PGM – Procedural Guidance Manual  
PMP – Pesticide Management Plan

Q

QAPP – Quality Assurance Program Plan

R

RCD – Resource Conservation Districts  
RFP – Request for Proposal  
ROW – Report of Waste Discharge  
RWQCB – Regional Water Quality Control Board  
RWQCB-1 – North Coast Regional Water Quality Control Board  
RWQCB-2 – San Francisco Bay Regional Water Quality Control Board  
RWQCB-3 – Central Coast Regional Water Quality Control Board  
RWQCB-4 – Los Angeles Regional Water Quality Control Board  
RWQCB-5 – Central Valley Regional Water Quality Control Board (all)  
RWQCB-5F – Central Valley Regional Water Quality Control Board (Fresno)  
RWQCB-5R – Central Valley Regional Water Quality Control Board (Redding)  
RWQCB-5S – Central Valley Regional Water Quality Control Board (Sacramento)  
RWQCB-6 – Lahontan Regional Water Quality Control Board (all)  
RWQCB-6SLT – Lahontan Regional Water Quality Control Board (South Lake Tahoe)  
RWQCB-6V – Lahontan Regional Water Quality Control Board (Victorville)  
RWQCB-7 – Colorado River Basin Regional Water Quality Control Board  
RWQCB-8 – Santa Ana Regional Water Quality Control Board  
RWQCB-9 – San Diego Regional Water Quality Control Board

S

SCC – State Coastal Conservancy  
SEP – Supplemental Environmental Project  
SFBCDC – San Francisco Bay Conservation Development Commission  
SLC – State Lands Commission  
SNARL – Sierra Nevada Aquatic Research Laboratory



SRWP – Sacramento River Watershed Program  
SWAMP – Surface Water Ambient Monitoring Program  
SWIM II – System for Water Information Management Phase II  
SWQPA – State Water Quality Protection Areas  
SWRCB – State Water Resources Control Board

T

TAC – Technical Advisory Committee  
THP – Timber Harvest Plan  
TIMS – Tahoe Information System  
TMDL – Total Maximum Daily Load  
TRPA – Tahoe Regional Planning Agency  
TSD – Technical Support Document

U

UC – University of California  
UCCE - University of California Cooperative Extension  
UCD-ICE - University of California Davis, Information Center for the Environment  
USBR – United States Bureau of Reclamation  
USCG - United States Coast Guard  
USDA - United States Department of Agriculture  
USDI - United States Department of Interior  
USEPA - United States Environmental Protection Agency  
USFS - United States Forest Service  
USFWS - United States Fish and Wildlife Service  
USGS - United States Geological Survey

V

VMP – Vegetation Management Plan  
VTS – Vegetated Treatment Systems

W

WCB – Wildlife Conservation Board  
WDR – Waste Discharge Requirement  
WLPZ – Watercourse and Lake Protection Zones  
WMI – Watershed Management Initiative  
WQMP – Water Quality Management Plan for Timber Operations on Nonfederal Lands in California  
WQPA – Water Quality Protection Areas

X

Y

Z

**APPENDIX II**  
**MANAGEMENT MEASURE DESCRIPTIONS**

**APPENDIX II  
NONPOINT SOURCE PROGRAM  
MANAGEMENT MEASURE DESCRIPTIONS**

**1.0 AGRICULTURE**

**1A. Erosion and Sediment Control.** MM 1A addresses NPS problems associated with soil erosion and sedimentation. Where erosion and sedimentation from agricultural lands affects coastal waters, landowners shall design and install a combination of practices to remove solids and associated pollutants in runoff during all but the larger storms. Alternatively, landowners may apply the erosion component of a Conservation Management System (CMS) as defined in the USDA Field Office Technical Guide.

**1B. Facility Wastewater and Runoff from Confined Animal Facilities.** Pursuant to MM 1B, facility wastewater and contaminated runoff from confined animal facilities must be contained at all times. Storage facilities should be of adequate capacity to allow for proper waste water use and should be constructed so they prevent seepage to ground water, and stored runoff and accumulated solids from the facility shall be managed through a waste use system that is consistent with MM 1C.

**1C. Nutrient Management.** MM 1C addresses the development and implementation of comprehensive nutrient management plans for areas where nutrient runoff is a problem affecting coastal waters. Such plans would include a crop nutrient budget; identification of the types, amounts and timing of nutrients necessary to produce a crop based on realistic crop yield expectations; identification of hazards to the site and adjacent environment; soil sampling and tests to determine crop nutrient needs; and proper calibration of nutrient equipment. When manure from confined animal facilities is to be used as a soil amendment and/or is disposed of on land, the plan shall discuss steps to assure that subsequent irrigation of that land does not leach excess nutrients to surface or ground water.

**1D. Pesticide Management.** Implementation of MM 1D is intended to reduce contamination of surface water and ground water from pesticides. Elements of this measure include reductions in pesticide use; evaluation of pest, crop and field factors; use of Integrated Pest Management (IPM); consideration of environmental impacts in choice of pesticides; calibration of equipment; and use of anti-backflow devices. IPM is a key component of pest control. IPM strategies include evaluating pest problems in relation to cropping history and previous pest control measures, and applying pesticides only when an economic benefit will be achieved. Pesticides should be selected based on their effectiveness to control target pests and environmental impacts such as their persistence, toxicity, and leaching potential.

**1E. Grazing Management.** MM 1E is intended to protect sensitive areas (including streambanks, lakes, wetlands, estuaries, and riparian zones) by reducing direct loadings of animal wastes and sediment. Upland erosion can be reduced by, among other methods: (1) maintaining the land consistent with the California Rangeland Water Quality Management Plan or Bureau of Land Management and Forest Service activity plans or (2) applying the range and pasture components of a Conservation Management System. This may include restricting livestock from sensitive areas by providing livestock stream crossings and by locating salt, shade, and alternative drinking sources away from sensitive areas.

**1F. Irrigation Water Management.** MM 1F promotes effective irrigation while reducing pollutant delivery to surface and ground waters. Pursuant to this measure, irrigation water would be applied uniformly based on an accurate measurement of cropwater needs and the volume of irrigation water applied, considering limitations raised by such issues as water concentrations, water delivery restrictions, salt control, wetland, water supply and frost/freeze temperature management. Additional precautions would apply when chemicals are applied through irrigation.

**1G. Education/Outreach.** The goals of MM 1G are to implement pollution prevention and education programs to reduce NPS pollutants generated from the following activities where applicable:

Activities that cause erosion and loss of sediment on agricultural land and land that is converted from other land uses to agricultural land;

Activities that cause discharge from confined animal facilities to surface waters;

Activities that cause excess delivery of nutrients and/or leaching of nutrients;

Activities that cause contamination of surface water and ground water from pesticides;

Grazing activities that cause physical disturbance to sensitive areas and the discharge of sediment, animal waste, nutrients, and chemicals to surface waters;

Irrigation activities that cause NPS pollution of surface waters.

## 2.0 FORESTRY

**2A. Preharvest Planning.** Forestry activities shall be planned to reduce potential delivery of pollutants to surface waters. Components of MM 2A address aspects of forestry operations, including: the timing, location, and design of harvesting and road construction; site preparation; identification of sensitive or high-erosion risk areas; and the potential for cumulative water quality impacts.

**2B. Streamside Management Areas (SMAs).** SMAs protect against soil disturbance and reduce sediment and nutrient delivery to waters from upland activities. MM 2B is intended to safeguard vegetated buffer areas along surface waters to protect the water quality of adjacent streams.

**2C. Road Construction/Reconstruction.** MM 2C requires that road construction/reconstruction shall be conducted so as to reduce sediment generation and delivery. This can be accomplished by following, among other means, preharvest plan layouts and designs for road systems, incorporating adequate drainage structures, properly installing stream crossings, avoiding road construction in SMAs, removing debris from streams, and stabilizing areas of disturbed soil such as road fills.

**2D. Road Management.** MM 2D describes how to manage roads to prevent sedimentation, minimize erosion, maintain stability, and reduce the risk that drainage structures and stream crossings will fail or become less effective. Components of this measure include inspections and maintenance actions to prevent erosion of road surfaces and to ensure the effectiveness of stream-crossing structures. The measure also addresses appropriate methods for closing roads that are no longer in use.

**2E. Timber Harvesting.** MM 2E addresses skid trail location and drainage, management of debris and petroleum, and proper harvesting in SMAs. Timber harvesting practices that protect water quality and soil productivity also have economic benefits by reducing the length of roads and skid trails, reducing equipment and road maintenance costs, and providing better road protection.

**2F. Site Preparation and Forest Regeneration.** Impacts of mechanical site preparation and regeneration operations—particularly in areas that have steep slopes or highly erodible soils or where the site is located in close proximity to a water body—can be reduced by confining runoff on site. MM 2F addresses keeping slash material out of drainageways, operating machinery on contours, timing of activities, and protecting ground cover in ephemeral drainage areas and SMAs. Careful regeneration of harvested forest lands is important in protecting water quality from disturbed soils.

**2G. Fire Management.** MM 2G requires that prescribed fire practices for site preparation and methods to suppress wildfires should be conducted as feasible in a manner that limits loss of soil organic matter and litter and that reduces the potential for runoff and erosion. Prescribed fires on steep slopes or adjacent to streams and that remove forest litter down to mineral soil are most likely to impact water quality.

**2H. Revegetation of Disturbed Areas.** MM 2H addresses the rapid revegetation of areas disturbed during timber harvesting and road construction—particularly areas within harvest units or road systems where mineral soil is exposed or agitated (e.g., road cuts, fill slopes, landing surfaces, cable corridors, or skid trails) with special priority for SMAs and steep slopes near drainage ways.

**2I. Forest Chemical Management.** Application of pesticides, fertilizers, and other chemicals used in forest management should not lead to surface water contamination. Pesticides must be properly mixed, transported, loaded, and applied, and their containers must be disposed of properly. Fertilizers must also be properly handled and applied since they also may be toxic depending on concentration and exposure. Components of MM 2I include applications by skilled workers according to label instructions, careful prescription of the type and amount of chemical to be applied, use of buffer areas for surface waters to prevent direct application or deposition, and spill contingency planning.

**2J. Wetland Forest Management.** Forested wetlands provide many beneficial water quality functions and provide habitat for aquatic life. Under MM 2J, activities in wetland forests shall be conducted to protect the aquatic functions of forested wetlands.

**2K. Postharvest Evaluation.** The goals of MM 2K are to incorporate postharvest monitoring, including: (a) implementation monitoring to determine if the operation was conducted according to specifications and (b) effectiveness monitoring after at least one winter period to determine if the specified operation prevented or minimized discharges.

**2L. Education/Outreach.** The goals of MM 2L are to implement pollution prevention and education programs to reduce NPS pollutants generated from applicable forestry activities.

### **3.0 URBAN**

The control of urban NPS pollution requires the use of two primary strategies: (1) the prevention of pollutant loadings and (2) the treatment of unavoidable loadings. California's urban MMs are organized to parallel the land use development process in order to address the prevention and treatment of NPS pollution loadings during all phases of urbanization. This strategy relies primarily on the watershed approach, which focuses on pollution prevention and source reduction practices. Emphasizing pollution prevention and source reduction practices over treatment practices is favored because conducting education practices and incorporating pollution prevention practices into project planning and design activities are generally more effective, require less maintenance, and are more cost-effective in the long term than treatment strategies. Treatment strategies should only be used to address unavoidable loadings or where they are truly cost-effective.

**3.1A-C. Runoff From Developing Areas.** The major opportunities to control NPS loadings occur during the following three stages of development: (1) the siting and design phase, (2) the construction phase, and (3) the post-development phase. Before development occurs, land in a watershed is available for a number of pollution prevention and treatment options, such as setbacks, buffers, or open space requirements, as well as wet ponds or constructed urban runoff wetlands that can provide treatment of the inevitable runoff and associated pollutants. In addition, siting requirements and restrictions and other land use ordinances, which can be highly effective, are more easily implemented during this period. After development occurs, these options may no longer be practicable or cost-effective. MMs 3.1A through 3.1C address the strategies and practices that can be used during the initial phase of the urbanization process. Sound watershed management implements both structural and nonstructural measures to mitigate adverse impacts of stormwater.

**3.2A-B. Runoff from Construction Sites.** The control of construction-related sediment loadings is critical to maintaining water quality. The implementation of proper erosion and chemical control practices during the construction stage can significantly reduce sediment loadings to surface waters. MMs 3.2A and 3.2B address construction-related practices. These MMs are intended to be applied to construction sites that do not have an NPDES permit.

#### **3.3A. Runoff from Existing Development**

This MM is designed to develop and implement watershed management programs to reduce runoff pollutant concentrations and volumes from existing development. These programs should include; 1) identification of priority local and/or regional watershed pollutant reduction opportunities, e.g., improvements to existing urban runoff control structures; 2) schedule for implementing appropriate controls; 3) means to limit the destruction of natural conveyance systems, and 4) preservation, enhancement or establishment of buffers along surface waterbodies and their tributaries.

#### **3.4A-B. On-site Disposal Systems (OSDS)**

This MM is intended to apply to on-site treatment systems, such as community septic systems, which can cause nutrient and pathogen contamination problems to ground and surface waters if they are not functioning properly. Proper design, appropriate standards for construction, installation and maintenance are considerations for OSDS systems in order to breakdown the contaminants, apply effective treatment, and protect water quality.

#### **3.5A-F. Transportation Development (Roads, Highways, and Bridges)**

This MM is intended to apply to existing, resurfaced, restored and rehabilitated roads, highways and bridges that contribute to adverse effects in surface waters. Poorly designed or maintained roads and bridges can generate significant erosion and pollution loads containing heavy metals, hydrocarbons, sediment, and debris that run off into and threaten the quality of surface waters and their tributaries.

**3.6A. Pollution Prevention/Education: General Sources** After development has occurred, lack of available land severely limits the implementation of cost-effective treatment options. MM 3.6A focuses on improving controls for existing surface water runoff through pollution prevention education to mitigate NPSs of pollution generated from on-going domestic, industrial and commercial activities. Education programs in an urban environment are key to maintenance of effective urban runoff pollution prevention.

## 4.0 MARINAS AND RECREATIONAL BOATING

### 4.1. Assessment, Siting, And Design Management Measures:

**4.1A. Water Quality Assessment.** Consider impacts to water quality in siting and designing new and expanding marinas.

**4.1B. Marina Flushing.** Site and design marinas to provide for maximum flushing and circulation of surface waters, which can reduce the potential for water stagnation, maintain biological productivity, and reduce the potential for toxic accumulation in bottom sediment.

**4.1C. Habitat Assessment.** Site and design marinas to protect against adverse impacts on fish and shellfish, aquatic vegetation, and important locally, State, or federally designated habitat areas.

**4.1D. Shoreline Stabilization.** Stabilize shorelines where shoreline erosion is a pollution problem.

**4.1E. Storm Water Runoff.** Implement runoff control strategies to remove at least 80 percent of suspended solids from storm water runoff coming from boat maintenance areas (some boatyards may conform to this provision through NPDES permits).

**4.1F. Fueling Station Design.** Locate and design fueling stations to contain accidental fuel spills in a limited area; and provide fuel containment equipment and spill contingency plans to ensure quick spill response.

**4.1G. Sewage Facilities.** Install pump out, pump station, and restroom facilities at existing and new and expanding marinas where needed to prevent sewage discharges directly to State waters.

**4.1H. Waste Management Facilities.** Install facilities at new and expanding marinas where needed for the proper recycling or disposal of solid wastes (e.g., oil filters, lead acid batteries, used absorbent pads, spent zinc anodes, and fish waste as applicable) and liquid materials (e.g., fuel, oil, solvents, antifreeze, and paints).

### 4.2. Operation And Maintenance Management Measures:

**4.2A. Solid Waste Control.** Properly dispose of solid wastes produced by the operation, cleaning, maintenance, and repair of boats to limit entry of these wastes to surface waters.

**4.2B. Fish Waste Control.** Promote sound fish waste management where fish waste is an NPS problem through a combination of fish cleaning restrictions, education, and proper disposal.

**4.2C. Liquid Material Control.** Provide and maintain the appropriate storage, transfer, containment, and disposal facilities for liquid materials commonly used in boat maintenance; and encourage recycling of these materials.

**4.2D. Petroleum Control.** Reduce the amount of fuel and oil that leaks from fuel tanks and tank air vents during the refueling and operation of boats.

**4.2E. Boat Cleaning and Maintenance.** Minimize the use of potentially harmful hull cleaners and bottom paints and prohibit discharges of these substances to State waters.

**4.2F. Maintenance of Sewage Facilities.** Maintain pumpout facilities in operational condition and encourage their use so as to prevent and control untreated sewage discharges to surface waters.

**4.2G. Boat Operation.** Prevent turbidity and physical destruction of shallow-water habitat resulting from boat wakes and prop wash.

### 4.3. Education and Outreach Management Measures:

**4.3A. Public Education.** Institute public education, outreach, and training programs to prevent and control improper disposal of pollutants into State waters.

## **5.0. HYDROMODIFICATION**

**5.1A-B. Channelization/Channel Modification.** California's MMs for channelization and channel modification promote the evaluation of channelization and channel modification projects. Channels should be evaluated as a part of the watershed planning and design processes, including watershed changes from new development in urban areas, agricultural drainage, or forest clearing. The purpose of the evaluation is to determine whether resulting NPS changes to surface water quality or instream and riparian habitat can be expected and whether these changes will have a detrimental (or negative) impact. Existing channelization and channel modification projects can be evaluated to determine the NPS impacts and benefits associated with the projects. Modifications to existing projects, including operation and maintenance or management, can also be evaluated to determine the possibility of improving some or all of the impacts without changing the existing benefits or creating additional problems. In both new and existing channelization and channel modification projects, evaluation of benefits and/or problems will be site specific.

**5.2A-C. Dams.** The second category of MMs addresses NPS pollution associated with dams. Dams are defined as constructed impoundments that are either: (1) 25 feet or more in height *and* greater than 15 acre-feet in capacity or (2) six feet or more in height *and* greater than 50 acre-feet in capacity. MMs 5.2A and 5.2B address two problems associated with dam construction: (1) increases in sediment delivery downstream resulting from construction and operation activities and (2) spillage of chemicals and other pollutants to the waterway during construction and operation. MM 5.2C addresses the impacts of reservoir releases on the quality of surface waters and instream and riparian habitat downstream.

## **6.0 WETLANDS, RIPARIAN AREAS AND VEGETATED TREATMENT SYSTEMS**

**6A. Protection of Wetlands/Riparian Areas.** Implementation of MM 6A is intended to protect the existing water quality improvement functions of wetlands and riparian areas as a component of NPS Programs.

**6B. Restoration of Wetlands/Riparian Areas.** Restoration of wetlands and riparian areas (MM 6B) refers to the recovery of a range of functions that existed previously by reestablishing hydrology, vegetation, and structure characteristics. Damaged or destroyed wetland and riparian areas should be restored where restoration of such systems will significantly abate polluted runoff.

**6C. Vegetated Treatment Systems.** MM 6C promotes the installation of vegetated treatment systems (e.g., artificial or constructed wetlands) in areas where these systems will serve a polluted runoff-abatement function. Vegetated filter strips and engineered wetlands remove sediment and other pollutants from runoff and wastewater and prevent pollutants from entering adjacent water bodies. Removal typically occurs through filtration, deposition, infiltration, absorption, adsorption, decomposition, and volatilization.

**6D. Education/Outreach.** MM 6D promotes the establishment of programs to develop and disseminate scientific information on wetlands and riparian areas and to develop greater public and agency staff understanding of natural hydrologic systems—including their functions and values, how they are lost, and the choices associated with their protection and restoration.

**APPENDIX III  
FIVE-YEAR PLAN  
CATEGORY OBJECTIVES DESCRIPTIONS**



**APPENDIX III  
2003-2008 FIVE -YEAR PLAN  
CATEGORY OBJECTIVES DESCRIPTIONS**

**1. AGRICULTURE CATEGORY OBJECTIVES**

**a) More efficiently use existing resources by continuing to improve upon and expand current interagency coordination in order to more effectively manage agricultural pollution (including monitoring and enforcement mechanisms).**

Due to the fact that the State of California is in a severe budget crisis, it is more critical than ever to make the most of our resources. In order to do this, efforts related to NPS should be coordinated in order to avoid duplication and to ensure that resources (including staff time) are being applied appropriately. Although extensive interagency coordination to address NPS pollution is occurring, there is still a need to bring in more of the State agencies as well as Federal and Local agencies. A majority of the activities in the Agriculture category involve multiple agencies, but there is still room for increased coordination, As new problems and solutions arise, new coordination needs to be developed.

This objective can be accomplished through a variety of activities listed by the SWRCB, RWQCBs and other State agencies as listed in the Table IIB. Examples include;

- Participation in Technical Advisory Committees in order to develop effective strategies for addressing NPS problems.
- Reviewing proposals and supporting proposals that will provide the greatest benefit for the cost of the work being done.
- Coordinating with other agencies to distribute outreach and education materials in order to reach a wider audience and to minimize costs.
- Continued funding of the RCD watershed coordinator grant program

This objective relates to NPS Program Goal #3 “Coordinate with public and private partners in all aspects of the Program”, and 5-Year Plan Objectives #1 and #4 which are “Promote the implementation of MMs and related practices by all levels of water quality managers (federal, State, watershed groups and other stakeholders)” and “Promote better leverage of inter-agency and private entity resources for NPS Programs”.

**b) Develop information on the overall effectiveness of MP implementation on improving water quality.**

In order to gain a greater understanding of the overall effect the NPS program is having on water quality, it is important to understand the capabilities of individual MP's for reducing NPS pollution. This understanding will result in a more appropriate expenditure of resources to address problems by utilizing on the most appropriate MP. This knowledge will also be utilized in the development of TMDL implementation plans for NPS TMDLs. It will also help landowners make decisions on appropriate MPs to put in place. Over the next five years there are several projects planned that will address this objective. For example;

- CDPR will be doing a study to evaluate the effectiveness of vegetated buffer strips and post-application tillage as means to reduce pesticide runoff.
- The Central Coast RWQCB will be performing inspections of grazing areas and irrigated croplands to look at the effectiveness of the implementation of various MPs.

This objective relates to NPS Program Goal #1 “Track, monitor, assess and report Program Activities” and 5-Year Plan Objectives #2 and #3 which are “Preserve water quality in water bodies that are currently meeting California water quality standards and protect them from future degradation from the impacts of nonpoint source pollution” and “Promote the

implementation of MMs and the use of MPs for the NPS component of TMDLs or in 303(d) listed waterbodies”.

**c) Develop and implement TMDLs for waterbodies impaired by agricultural sources.**

Once a waterbody is listed as “impaired”, a TMDL must be developed and implemented for that waterbody. Over the next five years, TMDLs will be developed and implemented in every Region of the state for a variety of pollutants from agriculture runoff (i.e. sediment, nutrients, pesticides, metals, etc.). A TMDL is considered to be “fully implemented”, water quality objectives are attained and the Beneficial Uses are restored. It can take several years before the TMDL is fully implemented, but having a TMDL in place is the critical first step for restoring an impaired waterbody. This objective relates to NPS Program Goals #2 and #5 which are “Target Program Activities” and Implement Management Measures” as well as 5-Year Plan objective #3 “Promote the implementation of MMs and the use of MPs for the NPS component of TMDLs or in 303(d) listed waterbodies”.

**d) Continue to promote outreach and education and provide technical assistance to the agricultural community.**

Prevention is the most cost effective way to deal with pollution. Although it is difficult to measure the amount of pollution prevented as a result of outreach and education, it is still considered an extremely important part of the NPS program and one of the program’s most valuable tools. There are several training workshops and certification programs as well as grant programs for Citizen Monitoring Activities included in the plan. These are just examples of activities intended to provide technical and financial assistance to stakeholders as well as increasing community awareness and involvement in improving water quality. This objective relates to NPS Program Goals # 4 and #5 which are “provide financial and technical assistance and education” and “Implement Management Measures” and 5-Year Plan Objective #4, “Promote better leverage of inter-agency and private entity resources for NPS Programs”.

**e) Continue to assess waterbodies, identify sources of NPS impacts from agricultural land, and increase the number of inspections of potential sources.**

In order to properly address NPS pollution problems it is important to know more about what the impacts are and what the sources are. Increased inspections will help to identify potential sources. Many of the RWQCBs have included ‘increasing inspections’ in their activities. This is critical to maintaining an awareness of where the problem areas are and if past problems have been remediated. Monitoring results from general assessments provide a greater understanding of where efforts are working and where more work still needs to be done. This objective relates to NPS Program Goal #1 “Track, monitor, assess, and report Program Activities” and 5-Year Plan Objectives #2 and #3 which are “Preserve water quality in water bodies that are currently meeting California water quality standards and protect them from future degradation from the impacts of nonpoint source pollution” and “Promote the implementation of MMs and the use of MPs for the NPS component of TMDLs or in 303(d) listed waterbodies”.

**f) Develop watershed based plans and target the implementation of management measures and practices to address impacts from agricultural land uses.**

Once the source of pollution is identified, a plan for addressing that source needs to be developed. Agencies and RWQCBs consult with stakeholders on the development of their plans. Although many of the watershed plans that are slated for development over the next five years will be in the form of a TMDL, this objective is intended to refer to non-TMDL watershed plans which will be developed. To name a few, watershed management plans will be developed for the Santa Maria River, the Middle Truckee River, The West Walker River, The Carmel River, and the San Joaquin River watersheds.

This objective relates to NPS Program Goals #1 and #2 which are “Track, monitor, assess, and report Program Activities” and “Target Program activities” and 5-Year Plan Objectives #2 and #3 which are to “Preserve water quality in water bodies that are currently meeting California water quality standards and protect them from future degradation from the impacts of nonpoint source pollution” and “Promote the implementation of MMs and the use of MPs for the NPS component of TMDLs or in 303(d) listed waterbodies”.

## 2. FORESTRY CATEGORY OBJECTIVES

### a) **Reduce interagency conflict regarding recommended mitigations through development of a Monitoring Agreement MOU.**

There are few that would argue that the most challenging aspects of effective watershed management in California’s forested lands are resolving conflicts of interest, reconciling varying interpretations of responsibilities and utilizing a unified approach to water quality management and information sharing. This applies in particular to the monitoring aspects of ensuring water quality protection in areas of active timber harvesting. For this reason, it is a focused objective for the next five years to address this particular issue.

There are a multitude of activities listed in the 2003-2008 Five-Year Implementation Plan that are geared in part toward addressing this objective, some of which include the following:

- Interagency Coordination (see Section I)
- Forest Activities Program Consistency and Effectiveness
- Probabilistic Monitoring (Section 1)
- Collaborative Watershed and Monitoring Approaches

These two objectives also tie in to the Overall Five-Year Plan objectives #1 and #4 (see Section II), and support the NPS Program Plan Goal #3, “Coordinate with Public and Private Partners in All Aspects of the Program.” How effectively these and other activities help meet the Five-Year Plan Objectives, and the NPS Program Goals will be evaluated in the NPS Biennial Progress Reports.

### b) **Develop or improve upon an effective, practical, and accepted approach for directly evaluating Cumulative Watershed Effects (CWE) for Forest Management activities.**

There are few that would argue that the most challenging aspects of effective watershed management in California’s forested lands are resolving conflicts of interest, reconciling varying interpretations of responsibilities and utilizing a unified approach to water quality management and information sharing. This applies in particular to the question of Cumulative Watershed Effects, and developing an understanding of the accumulation of conditions, both natural and manmade, that could be contributing to sedimentation or other detrimental water quality impacts. This is a critical issue, and for this reason, CWE evaluation is a focused objective for the next five years to address this particular issue.

There are a number of activities listed in the 2003-2008 Five-Year Implementation Plan that are geared in part toward addressing this objective, some of which include the following:

- Interagency Coordination (see Section I)
- Forest Practice Rule Review and Modification
- Water Quality Management Plan MOU and MAA changes
- Various agency Timber Harvest Plan Reviews

These two objectives also tie in to the Overall Five-Year Plan objectives #1 and #4 (see Section II), and support the NPS Program Plan Goal #3, "Coordinate with Public and Private Partners in All Aspects of the Program." How effectively these and other activities help meet the Five-Year Plan Objectives, and the NPS Program Goals will be evaluated in the NPS Biennial Progress Reports.

**c) Develop or improve interagency understanding and collaboration of their respective roles and responsibilities for water quality, related to timber operations.**

Another challenging aspect of effective watershed management in California's forested lands is that of resolving conflicts of interest, reconciling varying interpretations of responsibilities and utilizing a unified approach to water quality management and information sharing.

There are many of activities listed in the 2003-2008 Five-Year Implementation Plan that are geared toward addressing this objective, some of which include the following:

- Interagency Coordination (see Section I)
- Forest Activities Program Consistency and Effectiveness
- Collaborative Watershed and Monitoring Approaches
- Forest Practice Rule Review and Modification
- Water Quality Management Plan MOU and MAA changes
- Various agency Timber Harvest Plan Reviews
- Road Rule Committee

These two objectives also tie in to the Overall Five-Year Plan objectives #1 and #4 (see Section II), and support the NPS Program Plan Goal #3, "Coordinate with Public and Private Partners in All Aspects of the Program." How effectively these and other activities help meet the Five-Year Plan Objectives, and the NPS Program Goals will be evaluated in the NPS Biennial Progress Reports.

**d) Develop and implement watershed-based plans, including TMDL's in order to identify and address land-use impacts including those from forestry practices.**

Effective and efficient measures to protect good quality waters, to improve impaired water bodies, and to restore beneficial uses will be best achieved if they are performed according to a comprehensive watershed-based plan. In the case of impaired water bodies, this plan may take the form of a TMDL implementation plan, but the end result of effective implementation will be the goal of achieving or maintaining watershed goals expressed in the plans.

There are activities listed in the Five-Year Implementation Plan that will address this objective, including:

- Watershed Management Strategic Planning (See Section I)
- Collaborative Watershed and Monitoring Approaches
- Blackwood Creek TMDL
- Deer Creek watershed erosion & sediment control project
- State Lands Field Assessment (see Section I)
- Develop TMDLs and associated implementation plans (see Section I)

This forestry objective ties in to the Overall Five-Year Plan Objectives #2 and #3, and supports NPS Program Plan Goal #1, "Track, Monitor, Assess, and Report Program Activities, and Program Goal #2, "Target Program Activities."

**e) Encourage the implementation of NPS Management Measures on all forestlands in California, including private and federal lands.**

Implementation of NPS Forestry MMs is currently limited to non-federal forest lands in California. These include private forestlands, which are regulated by the State, and state forestlands, which are managed by the State. The USDA Forest Service, manages about 20 million acres of federal lands in California, about one-third of which is forested.

There are activities listed in the Five-Year Implementation Plan that will address this objective, including:

- Adoption of additional new water quality-related Forest Practice Rules
- Application of Timber Harvest Planning (THP) process on private and state forestlands
- Inspection and enforcement of water quality related Forest Practice Rules and THP prescribed mitigations
- Collaborative Watershed and Monitoring Approaches

This Forestry Objective is supportive of Overall Five-Year Plan Objective #1, and promotes NPS Program Plan Goal #3, "Coordinate with Public and Private Partners in All Aspects of the Program."

**f) Provide educational opportunities for THP reviewers, foresters, pesticide regulators and other forest management parties that will address water quality and environmental protection.**

The purpose of this objective is to reinforce the necessity of effective pollution prevention through education of those that can make a difference. Education and Outreach is often considered the most cost-effective method of pollution prevention, although it's direct effect on water quality is difficult to measure.

There are activities listed in the 1998-2003 Five-Year Implementation Plan that will address this objective, including:

- Tahoe Forest Stewardship Day
- Firefest
- Interagency Cross-training
- Adopt a Watershed for Tahoe/Truckee (See Section I)
- Clean Sierra Waters NPS Control Project (See Section I)
- Citizen Monitoring and Education (See Section I)

This Forestry Objective is supportive of the Overall Five-Year Plan Objectives, and promotes NPS Program Goal #4, "Provide Financial and Technical Assistance Education."

**g) Continue to develop and conduct effectiveness evaluations of forestry management practices with respect to protection of water quality.**

Finally, it is necessary to develop adequate measures of the effectiveness of the NPS Program, through its implementation of management practices, especially with respect to their impact on water quality.

There are activities listed in the 1998-2003 Five-Year Implementation Plan that will address this objective, including:

- THP and FPR inspection and enforcement
- SWAMP Implementation Plan (see Section I):
- Timber Company Sediment Input Evaluation

- Monitoring of FPR Implementation and Effectiveness
- Conversion technology
- Probabilistic Monitoring Pilot Project

This Forestry Objective is the fundamental support of NPS Program Goal #1 “Track, Monitor, Assess and Report Program Activities.”

### 3. URBAN OBJECTIVES

**a. Coordinate with the SWRCB and RWQCB TMDL staff and managers to include NPS MMs in the TMDL Implementation Plans, as appropriate, and**

**b. Promote coordination of interagency programs that protect water quality from urban runoff pollution.**

Coordination and collaboration in order to increase efficiency and decrease cost is always an important endeavor. But they have never been more important than they are now, considering the current fiscal difficulties that the State of California finds itself in. It is an appropriate time for California to take inventory of related activities, and find the means to implement NPS MMs through programs that already exist. This will be a primary focus of the IACC over the next five year period, including activities that take place in the Urban Category.

Some examples of activities that are listed in Table IVB to address these two Urban Category Objectives are as follows:

- Urban Pesticide Committee Support
- Interagency Coordinating Committee (Section I, Table IB)
- multiple TMDL implementation activities

These two objectives are supportive of Program Plans Goal #3 (Coordinate with Public and Private Partners in All Aspects of the Program and #5 (Implement MMs). It also promotes the Five-Year Plan Objectives #1 (Promote the implementation of MMs and related practices by all levels of water quality managers), and #3 (Promote implementation of MMs and use of MPs for the NPS component of TMDLs or in 303(d) listed water bodies).

**c. Through the implementation of MMs, reduce the potential for contamination of surface and groundwater that results from uncontrolled or poorly-controlled urban runoff practices.**

Protection of surface and groundwater quality through the complete implementation of MMs by the year 2013 is the primary goal of the NPS Program Plan. Therefore it is essential that activities in the Urban Category objectives focus on this particular goal. It is particularly true in California, where urban growth is increasing at such a rapid pace, that attention be given to the protection of waters that is currently high quality, and that appropriate planning and prevention measures be taken to ensure the beneficial uses of these waters. Similarly, ongoing protection of all waters of the State from the effects of urban land use is critical, whether or not the water bodies are already impaired.

Some examples of activities that are listed in Table IVB to address this Objective are as follows:

- Manage contract for Mercury Reduction
- Railroad Operations Pollution Prevention
- Onsite Wastewater Treatment System Standards Development

- Manage contract for Urban Stormwater Retrofit Projects

This objective is supportive of Program Plan Goal #5 (Implement MMs), which includes the commitment to implement all 61 MMs in the Program Plan by the year 2013. It also promotes Five-Year Plan Objective #2 (Preserve water quality in water bodies that are currently meeting California water quality standards and protect them from future degradation from the impacts of nonpoint source pollution).

**d. Develop tools to assess the effectiveness of urban water pollution programs**

There is a need to understand the connection between MM implementation and urban water pollution programs and their affect on preventing water pollution or restoring impaired water bodies. The link between urban program implementation and actual water quality improvement is critical to the understanding of the effectiveness of the NPS Program MMs, and to the planning for future program activities. This is not a straightforward relationship, and it is particularly difficult to assess the ‘prevention’ of water pollution, or to assess the effectiveness of Education Outreach programs. Yet there needs to develop a set of indicators or some other mechanism to demonstrate program effectiveness.

Some examples of activities that are listed in the Five-Year Plan to address this Objective are as follows:

- Probabalistic Monitoring (Section I)
- Evaluate on-site disposal systems for compliance with policy
- Assess Occurrences and Sources of Contamination in Castaic Lake
- Malibu Creek Watershed-ide Monitoring Plan

This objective is supportive of Program Plan Goal #1 (Track, Monitor, Assess and Report Program Activities), and of Five-Year Plan Objective #1, which includes ‘Develop a tracking mechanism(s) for MM and MP effectiveness that can be used by and shared with other agencies and the public)

**e. Increase the availability of regulatory and guidance documents and/or instructional workshops to demonstrate effective urban pollution control programs and policies.**

There is a necessity to build the NPS Program on a foundation of public involvement, and to continue the program through all local entities and through all stages of the NPS Program. In order to accomplish complete involvement in the NPS Program by all levels of public agencies, a certain amount of capacity-building needs to be accomplished. A part of that capacity building includes development of appropriate guidance documents and training opportunities in order to spread the knowledge base necessary to implement pollution prevention programs.

Some examples of activities that are listed in the Five-Year Plan to address this Objective are as follows:

- Urbanization and Stream Erosion Prevention Models
- Resource Efficient Landscaping
- MURP & NEMO (Model Urban Runoff Program and Nonpoint Source Education for Municipal Officals)
- Stormwater Education
- Erase the Waste

This objective is supportive of Program Plan Goal #4 (Provide Financial and Technical Assistance and Education), and Five-Year Plan Objectives #1 (Promote implementation of

MMs by all levels of water quality managers), and #4 (Promote better leverage of inter-agency and private entity resources for NPS Programs).

**f. Reduce the number of uncontrolled NPS pollution sources by increasing the number of municipalities, industries and construction sites that utilize NPS MMs and/or fit under the permitted State Storm Water Program.**

There are activities listed in the Five-Year Implementation Plan that will address this objective, including:

- Permit NPS Criteria Development
- Stormwater runoff Phase II unit assessment for applicability
- Beach Water Quality Task Force
- Hazardous Waste Facility Inspections

**g. Support the development and implementation of watershed-based plans, including TMDLs and Storm Water Pollution Prevention Plans (SWPPPs), in order to identify and address impacts from urban land use.**

Effective and efficient measures to protect good quality waters, to improve impaired water bodies, and to restore beneficial uses will be best achieved if they are performed according to a comprehensive watershed-based plan. In the case of impaired water bodies, this plan may take the form of a TMDL implementation plan, or Stormwater Pollution of achieving or maintaining watershed goals expressed in the plans.

There are activities listed in the Five-Year Implementation Plan that will address this objective, including

- multiple activities for Watershed Management Plan Development
- multiple activities for TMDL implementation plan development

This objective is supportive of Program Plan Goal #2 (Target Program Activities), and Five-Year Plan Objectives #1 (Promote the implementation by all levels of water quality managers), and #4 (Promote better leverage of inter-agency and private entity resources for NPS Programs).

#### **4. MARINAS AND RECREATIONAL BOATING OBJECTIVES**

**a. Assess implementation and effectiveness of existing standards and develop and enforce standards that will decrease marina and recreational boating's contribution to nonpoint source pollution.**

In 1999, a SWRCB advisory panel completed a study to determine whether marina fueling systems should be upgraded to prevent releases of MTBE and petroleum products to surface water bodies. As a result of this study two major recommendations were made. First, to address inadequate Marina Fueling Facility (MFF) material and design criteria (which contribute to ongoing fuel releases), the panel recommended a material and design standard be written specifically for marina fueling systems. Second, the panel identified inconsistent statutory and regulatory language for MFFS and recommended that aboveground and underground storage tank statutory and regulatory requirements for marinas be made consistent and specific to marina operations. SWRCB activities have been included in the NPS Plan to implement these recommendations.

The previous Five-Year Implementation Plan for 1998-2003 included SWRCB/RWQCB activities to establish minimum standards defining adequate number of pumpouts, dump stations, and/or restroom facilities for marinas. These activities have been carried over, and



include establishing regional standards, providing for the installation and maintenance of an adequate number of sewage disposal facilities, and increasing accessibility to and use of the facilities, in specified regions.

This objective is supported by activities in the following MMs: Fueling Station Design (MM 4.1F), Petroleum Control (MM 4.2D), Sewage Facilities (MM 4.1G), and Maintenance of Sewage Facilities (MM 4.2F). It also supports NPS Program Goal #5 (Implement Management Measures), and the first three overall Five-Year Plan Objectives.

**b. Develop educational programs, training workshops and other outreach services to increase marinas and recreational boater's pollution prevention efforts.**

A boating public that understands the causes and effects of pollution is more likely to want clean water and healthy aquatic environments. If the public knows about the simple and effective ways to reduce their impact on the environment, they will usually be happy to do their part. Educational programs, training workshops and other outreach services are the most effective ways to prevent pollution in and around marinas and from recreational boating.

This objective is supported by activities in the Education and Outreach MM. Thirteen activities are listed in the Five-Year Implementation Plan for 2003-2008 that support this objective. The objective also supports NPS Goal #3 (Coordinate with public and private partners) and all of the Five-Year Plan objectives.

**c. Develop systems to reward marinas for pro-active environmental-friendly activities.**

It is important to recognize those marinas that have already made significant efforts to minimize the environmental impacts of their facilities through implementation of the NPS Program's management measures for this category. Recognition of existing clean marinas could help to provide models for what can be done by showing what has already been done to keep marinas and boating in California clean. The California Coastal Commission has an activity that includes promoting the formation of a Clean Marinas Recognition Program for California. This objective is supported by activities in of the Marinas and Recreational Boating MMs and addresses most of the NPS Program Plan goals and over-all objectives.

**d. Assess existing environmental services and expand environmental services at marinas that are supportive of clean boating practices.**

The ongoing efforts for this objective include assessing the adequacy of and providing additional services for: sewage disposal, used oil recycling, bilge pad exchange, and hazardous waste disposal. Many state agencies have listed activities and are working together to accomplish the goals of this objective, including: CIWMB, DBW, CCC, RWQCBs, and SWRCB. In addition, the Marinas and Recreational Boating Workgroup, consisting of representatives from 23 state agencies have been focusing their efforts on this objective. This objective is supported by activities in the following MMs: Sewage Facilities (MM 4.1G), Waste Management Facilities (4.1H), Liquid Material Control (MM 4.2C), and Petroleum Control (MM 4.2D). It also addresses all of the NPS Program Goals and all of the Five-Year Plan overall objectives.

**e. Develop information on the overall effectiveness of MP implementation on improving water quality.**

In order to gain a greater understanding of the overall effect the NPS program is having on water quality, it is important to know what individual MP's are capable of in terms of

reducing NPS pollution. This information will result in a more appropriate expenditure of resources to address problems by focusing them on the most successful MPs. This knowledge will also be utilized in the development of TMDL implementation plans for NPS TMDLs. It will also help landowners make decisions on appropriate MPs to put in place. The activities listed in the 5-Year plan that support this objective are RWQCB activities for BMP implementation in TMDL listed (impaired) water bodies. This objective applies to all of the MMs listed for this NPS category. It also supports NPS Program Goal #1 and #1 and #3 of the Five-Year Plan overall objectives.

**f. Continue to improve upon and expand existing interagency coordination to more effectively manage pollution from recreational boaters and marinas.**

The NPS Program implementing agencies recognize that interagency coordination is crucial to implementation of the MMs established for this category of NPS pollution. To accommodate this need, the Marinas and Recreational Workgroup was formed, consisting of representatives from 23 state agencies who have regulatory responsibilities for marina operations. This workgroup meets bi-monthly to discuss marina issues and to coordinate activities. This objective is supported by activities in all of the MMs listed for this NPS category. It also supports NPS Program Goal #3, and the Five-Year Plan objectives #1 and #4.

**g. Continue to assess waterbodies, identify sources of NPS impacts from recreational boaters and marinas and increase inspections.**

In order to properly address NPS pollution problems it is important to know more about what the impacts are and what the sources are. Increased inspections and baseline water quality assessments at marinas will help to identify potential sources. There are numerous activities planned to assess marinas and surrounding water bodies to identify sources of NPS pollution from marina operations and boater activities. This is critical to maintaining an awareness of where the problem areas are and if past problems have been remediated. Monitoring results from general assessments provide a greater understanding of where efforts are working and where more work still needs to be done.

This objective supports implementation of MM 4.1C (Water Quality Assessment). It also supports NPS Program Goal #1 and the Five-Year Plan objective #2.

**h. Develop and implement watershed-based plans, including TMDLs in order to identify and address impacts from recreational boaters and marinas**

Effective and efficient measures to protect good quality waters, to improve impaired water bodies, and to restore beneficial uses will be best achieved if they are performed according to a comprehensive watershed-based plan. In the case of impaired water bodies, this plan may take the form of a TMDL implementation plan, but the end result of effective implementation will be the goal of achieving or maintaining watershed goals expressed in the plans. Activities listed to support this objective are primarily those listed by RWQCBs for implementation of TMDLs in areas that are or may be impacted by nonpoint source pollution from marinas or recreational boating activities. MMs supported by this objective are dependent upon the pollution source(s) that has caused the impairment for which the water body is listed. The objective supports all of the NPS Program Goals and #3 of the Five-Year Plan objectives.

**i. Continue educating marina owners and operators about the programs and funds that are available to help them comply with local, state, and federal regulations.**

The purpose of this objective is to reinforce the necessity of effective pollution prevention through education of those that can make a difference. Education and Outreach is often considered the most cost-effective method of pollution prevention, although it's direct effect on water quality is difficult to measure. This objective is supported by activities in the Education and Outreach MM. There are over twenty activities listed in the Five-Year Implementation Plan for 2003-2008 that support this objective. This objective is supportive of the overall five-year plan objectives and promotes NPS Program goal #4 (Provide financial and technical assistance and education).

**5. HYDROMODIFICATION CATEGORY OBJECTIVES**

**a) Maintain and restore the physical and chemical characteristics of streams, riparian habitats, and their associated beneficial uses with consistent statewide stream protection policy.**

Healthy streams and riparian areas serve many functions, including: ensuring reliable water supplies for human needs; providing habitats for fish and wildlife; conveying flood discharges, replenishing beaches with sand; and supplying enriching sediments to downstream wetlands and estuaries. These functions depend on the existence in balance of several physical and chemical characteristics, such as vegetated channel boundaries, stream valley slopes, stream channel slopes and lengths, sediment loads, sediment sizes, flow discharges, roughness of the stream channel, active channel widths and depths, and nutrient loadings and uptakes. Consistent policies to maintain and restore these stream attributes can reduce regulatory conflicts and ultimately ensure better protection of these resources.

Several activities listed in the 2003-2008 Five-Year Implementation Plan are geared toward addressing this objective, some of which are as follows:

- Stream protection and management amendments in the Basin Plan.
- Providing training on stream protection Basin Plan amendments and policy, including workshops for A Primer on Stream and River Protection for the Regulator and Program Manager.
- Developing technical assistance manual and CEQA appendix for project designs.

This objective ties in to the Overall Five-Year Plan Objective #1 (See Section I), but also supports the NPS Program Plan Goals #2, "Target Program Activities", and #3, "Coordinate with public and private partners in all aspects of the Program".

**b) Develop information on MP implementation to ensure consistent requirements, implementation, and effectiveness of mitigation and restoration projects.**

Most stream/river regulators and managers are not professional fluvial geomorphologists. In order to achieve consistency in requiring and implementing appropriate management practices, there needs to be a concerted effort to synthesize and make sense of the wealth of stream/river protection and restoration information available. The object is to translate a complicated field of river science into something that a relative novice can apply to regulatory and program management issues, with a California emphasis. Some activities listed in the 2003-2008 Five-Year Implementation Plan address this objective, including:

- Identifying management practices for channel maintenance activities.
- Developing technical assistance manual and CEQA appendix for project designs.

- Disseminating up-to-date technical information and providing training to Regional Board and local agency staffs on management practices to avoid impacts to riparian areas.

This objective ties in to the Overall Five-Year Plan Objective #1, and supports the NPS Program Plan Goal #4, “Provide financial and technical assistance and education”.

**c) Prevent and control streambank, shoreline and beach erosion with a consistent statewide policy and watershed approach.**

Streamside and shoreline developments, in-channel structures, and excessive runoff discharges can destabilize banks and shorelines and contribute to additional NPS pollution. These situations need to be confronted with a systematic approach that recognizes pollution at its source and addresses the cause of a problem rather than just its symptoms. Some activities listed in the 2003-2008 Five-Year Implementation Plan address this objective, including:

- Participating in stream floodplain planning activities.
- Developing urbanization and stream erosion prevention model.
- Issuing general Waste Discharge Requirements for low impact channel maintenance activities.

This objective ties in to the Overall Five-Year Plan Objective #1, and supports the NPS Program Plan Goals #2, “Target Program activities”, and #3, “Coordinate with public and private partners in all aspects of the Program”.

**d) Promote interagency collaboration in habitat restoration projects and continue to improve upon and expand partnerships and coordination in tackling the issue of eroding streambanks and shorelines.**

Interagency collaboration in habitat restoration promotes information and resource exchange, ensures the identification of projects most in need of attention, reduces regulatory conflicts, concentrates limited available resources in priority areas, and increases the efficiency in project implementation.

Some of the activities listed in the 2003-2008 Five-Year Implementation Plan that address this objective include:

- Coordinating in watershed restoration project review.
- Participating in Floodplain Management Coordinating Group.
- Providing assistance in resource assessments for the Big River State Park restoration planning efforts.
- Participating in the multi-agency Upper Yuba River Studies for restoring salmon migration.

This objective ties in to the Overall Five-Year Plan Objectives #1 and #4, and supports the NPS Program Plan Goals #3 and #4, “Coordinate with public and private partners in all aspects of the Program” and “Provide financial and technical assistance and education”.

**e) Enhance outreach and promote information exchange among State agencies, local entities, and interested parties.**

An effective way to protect streams and riparian areas is to make sure that all proposed developments minimize their impacts on these resources through sound site design, source control, and treatment control. In addition, through visionary and comprehensive

land use planning, developments can be steered away from riparian areas. All these efforts require partnering with state and local stakeholders in the zoning, subdivision, and permitting processes, and/or educating project proponents and regulators on the preferred management practices to reduce adverse effects. In addition, public and local government outreach allows for direct interactions between the regulators and regulated communities and, in the process, the development of a better understanding of each other. In the long run, all these efforts will not only save resources and time by ensuring regulatory consistency, they will also make the permitting process a smoother one, and enhance the likelihood of project success.

Some of the activities listed in the 2003-2008 Five-Year Implementation Plan that address this objective include:

- Disseminating up-to-date information regarding floodplain, construction and long-term maintenance costs of MPs, and setbacks.

Providing training on stream protection Basin Plan amendments and policy, including workshops for [A Primer on Stream and River Protection for the Regulator and Program Manager](#).

- Participating in the Markleeville Creek Day to educate the community and engage volunteers in stream improvement projects.
- Incorporating public outreach and citizen monitoring into the Davies & Merrill Creeks Watershed Restoration Project.

This objective ties in to the Overall Five-Year Plan Objective #1, and supports the NPS Program Plan Goals #3, “Coordinate with public and private partners in all aspects of the Program”, and #4, “Provide financial and technical assistance and education”.

**f) Continue to assess waterbodies, identify sources of NPS impacts from hydromodification activities as well as increase inspections and monitoring of mitigation and restoration efforts.**

Adverse effects from certain hydromodification practices may only manifest themselves over time. Constant vigilance is needed to ensure the timely dispensation of appropriate remedies when necessary. Similarly, regular long-term monitoring and inspections are required to assure the success of any mitigation or restoration efforts.

Some of the activities listed in the 2003-2008 Five-Year Implementation Plan that address this objective include:

- Providing stream resource assessments in watershed restoration projects.
- Monitoring of success for the Bagley Valley Restoration Project.
- Monitoring Panoche Creek Revitalization Project for MP effectiveness.

This objective ties in to the Overall Five-Year Plan Objective #2, and supports the NPS Program Plan Goals #1, “Track, monitor, assess, and report Program Activities”, and #2, “Target Program activities”.

**g) Develop and implement watershed-based plans, including TMDLs in order to identify and address impacts from hydromodification activities.**

Watershed-based plans provide a complete picture of the lay of the land. They enable the development of systematic management approaches that recognize pollution at its source and address the cause of a problem rather than just its symptoms. These approaches acknowledge the importance of solving problems in the upper watershed first before

tackling those in the lower watershed, for those areas lower in the watershed will be once more destabilized by upstream problems if they are not first corrected.

Examples of activities listed in the 2003-2008 Five-Year Implementation Plan that address this objective include:

- Developing TMDL for mercury in Guadalupe River.
- Completing and implementing the Bear Creek TMDL.
- Completing and implementing the Pleasant Valley Reservoir TMDL.

This objective ties in to the Overall Five-Year Plan Objectives #1 and #3, and supports the NPS Program Plan Goal #2, “Target Program activities”.

**h) Streamline the permitting process for hydromodification projects, including swift measures for invasive species eradication.**

Streamlining the permitting process can provide good customer service as long as the environment is not compromised in the process. It can also be crucial to projects that are time-sensitive. For example, delays in issuing a permit for eradicating invasive species could mean the spread of the exotic organisms beyond control.

Examples of activities listed in the 2003-2008 Five-Year Implementation Plan that address this objective are:

- Providing technical assistance in the permit streamlining process.
- Establishing formal agreements between agencies on program-level issues.
- Collaborating with ACOE to modify and improve emergency permits.
- Developing a regional stream bank and bed permit streamlining program for Phase III of the Calleguas Creek Watershed Treatment Project.

This objective ties in to the Overall Five-Year Plan Objective #4, and supports the NPS Program Plan Goal #3, “Coordinate with public and private partners in all aspects of the Program”.

## **6. WETLANDS CATEGORY OBJECTIVES**

**a) Identify, require, and/or implement wetland protection management practices to protect wetlands from NPS pollution.**

Wetlands and riparian areas reduce polluted runoff by filtering out runoff-related contaminants such as sediment, nitrogen and phosphorus. They also attenuate flows and protect downstream areas from adverse impacts such as channel scour, erosion, and temperature and chemical fluctuations. However, excessive NPS pollution can change a wetland’s hydrology, substrate, geochemistry, or species composition, and reduce its ability to filter out pollutants. This objective ties in to the Overall Five-Year Plan Objectives #1, #2 and #3 (See Section I), but also supports the NPS Program Plan Goals #2, “Target Program Activities”, and #5, “Implement Management Measures”.

Several activities listed in the 2003-2008 Five-Year Implementation Plan are geared toward addressing this objective, some of which are as follows:

- Technical assistance for project designs to avoid wetlands and riparian areas. (See Section I)
- Suisun Marsh TMDL development and implementation.
- Ensuring compliance with CEQA and Porter-Cologne Act.
- Implementation of the 401 Water Quality Certification Program.

**b) Promote and assist in the study of wetland and riparian habitats at the watershed scale, and incorporate their protection into local planning processes.**

Watershed-scale knowledge of wetlands and riparian habitats provides a complete picture of the lay of the land. It emphasizes the cause-and-effect relationships between pollution sources and destinations, and between specific pollutants and their downstream effects. This knowledge allows for the development of a coordinated scheme that prioritizes wetlands and riparian areas for preservation. The incorporation of this scheme into the local planning process establishes a systematic approach to regulating development for wetland and riparian area protection. This objective ties in to the Overall Five-Year Plan Objective #1, and supports the NPS Program Plan Goal #2, “Target Program Activities”.

Some activities listed in the 2003-2008 Five-Year Implementation Plan address this objective, including:

- Bay Area Wetlands Planning and Monitoring.
- Inclusion of wetlands in the Basin Plan.
- Providing technical assistance to local governments.

**c) Work with IACC agencies, whose activities affect the health or function of wetland/riparian areas, to develop agency specific wetland/riparian protection policies, and to assist in the exercise of their authority to implement those policies.**

Despite the wide recognition of wetlands’ ability to improve water quality and provide crucial habitats to organisms, the approaches adopted by various agencies for their protection are inconsistent at best. For example, not all RWQCBs have assigned beneficial uses for wetlands. Agencies need to develop consistent policies to avoid regulatory conflicts. In addition, at these times of severe budget shortages, the IACC needs to promote better coordination of wetland programs to leverage the limited resources for maximum benefits. This objective ties in to the Overall Five-Year Plan Objectives #1 and #4, and supports the NPS Program Plan Goal #3, “Coordinate with public and private partners in all aspects of the Program”.

A few activities listed in the 2003-2008 Five-Year Implementation Plan address this objective, including:

- Inclusion of wetlands in the Basin Plan.
- Development of compliance monitoring criteria for compensatory mitigation projects.
- Providing technical training to Regional Board and local agency staffs.

**d) Develop/modify and enforce wetland restoration standards on all restoration and mitigation projects.**

Consistent standards need to be developed for wetland/riparian restoration and mitigation projects. This is especially important in light of the fact that, according to studies, most mitigation projects have failed to achieve their established objectives, if there were ever undertaken at all. This objective ties in to the Overall Five-Year Plan Objective #1, and supports the NPS Program Plan Goals #1 and #5, “Track, monitor, assess, and report Program Activities” and “Implement Management Measures”.

Some of the activities listed in the 2003-2008 Five-Year Implementation Plan that address this objective include:

- Restoring and enhancing wetland and riparian resources through strict mitigation requirements.
- Developing compliance monitoring criteria for compensatory mitigation projects.
- Reviewing and monitoring of Baylands Wetlands projects.
- Developing assessment tool for wetland mitigation projects.

**e) Develop and promote a consistent means of evaluating and guiding riparian and wetland projects.**

A consistent means of evaluating and guiding riparian and wetland projects does not only make economic and regulatory sense, it leads to good public service. A unified approach to handling proposed wetland/riparian projects means different agencies can share information and not have to “reinvent the wheel”. It also reduces regulatory conflicts and helps to avoid putting the project applicants in the difficult position of having to satisfy multiple and sometimes contradictory mandates. This objective ties in to the Overall Five-Year Plan Objective #1, and supports the NPS Program Plan Goal #3, “Coordinate with public and private partners in all aspects of the Program”. Some of the activities listed in the 2003-2008 Five-Year Implementation Plan that address this objective include:

- Developing a technical assistance manual and CEQA Guidelines Appendix for project design.
- Developing management practice guidance.

**f) Fund wetland/riparian restoration projects on a watershed basis, so that projects in the upper watershed are funded before projects in the lower watershed. Sections lower in a stream channel inevitably will become destabilized by the upper watershed problems if upper watershed/stream channels are not corrected first..**

It is important to recognize that wetlands and riparian areas in the upper and lower parts of a watershed interact in more ways than one. Effective and long-lasting restoration can often be achieved only with a sensible prioritization of efforts. It ensures that the success of one project will not be undermined by the continuing failure of another. This objective supports the NPS Program Plan Goals #2, “Target Program activities” and #3, “Coordinate with public and private partners in all aspects of the Program”. Some of the activities listed in the 2003-2008 Five-Year Implementation Plan that address this objective include:

- Southern California Wetlands Recovery Project.
- Upper SCR Watershed *Arundo donax* eradication program.

**g) Streamline the permitting process for wetland and riparian protection and restoration projects, including swift measures for invasive species eradication.**

Streamlining the permitting process can provide good customer service as long as the environment is not compromised in the process. It can also be crucial to projects that are time-sensitive. For example, delays in issuing a permit for eradicating invasive species could mean the spread of the exotic organisms beyond control. This objective ties in to the Overall Five-Year Plan Objective #4, and supports the NPS Program Plan Goal #3, “Coordinate with public and private partners in all aspects of the Program”. Examples of activities listed in the 2003-2008 Five-Year Implementation Plan that address this objective include:

- Establishing interagency formal agreements.
- Coordinating with the National Park Service to develop effective permitting options.

**h) Evaluate efficacy of VTSs for different categories of pollutants. Develop design criteria, standards, and guidelines.**

Using VTSs to treat NPS pollution is an increasingly popular option. However, with their gaining popularity, regulators often have to make quick design decisions without the benefit of knowing if a selected VTS will truly satisfy the various demands placed on it. A comprehensive evaluation of VTSs needs to be conducted and design guidelines developed.



This objective ties in to the Overall Five-Year Plan Objective #1, and supports the NPS Program Plan Goals #3, “Coordinate with public and private partners in all aspects of the Program”, and #4, “Provide financial and technical assistance and education”.

An example of activities listed in the 2003-2008 Five-Year Implementation Plan that address this objective is:

- City of Los Angeles Augustus B. Hawkins Wetlands Habitat.

**i) Develop public education and outreach materials for distinguishing between habitat wetlands and VTSSs, and detailing the regulatory maze and requirements for habitat wetlands and VTSSs.**

The lack of clear distinctions between habitat wetlands and VTSSs can lead to the abandonment of VTSSs as a viable means of NPS control even if they are obviously the best available option. For example, without unambiguous guidelines, even a VTSS created strictly for the purpose of stormwater treatment could be prohibited from conducting the necessary maintenance to preserve its treatment functions because those activities might detract from the VTSS’ habitat values. The time has come to set habitat wetlands and VTSSs apart. This objective ties in to the Overall Five-Year Plan Objective #1, and supports the NPS Program Plan Goals #3, “Coordinate with public and private partners in all aspects of the Program”, and #4, “Provide financial and technical assistance and education”.

An example of activities listed in the 2003-2008 Five-Year Implementation Plan that address this objective is:

- Developing guidance on management practices including wetlands and VTSSs.

**j) Develop educational planning workshops and/or outreach materials for locally elected officials, and landowners, managers, developers and operations whose activities present threats to wetland/riparian areas.**

An effective way to protect wetlands and riparian areas is to make sure that all proposed developments minimize their impacts on these resources through sound site design, source control, and treatment control. Or, better yet, through visionary and comprehensive land use planning, developments can be steered away from wetlands and riparian areas. All these efforts require partnering with local stakeholders in the zoning and subdivision processes, and/or educating project proponents on the preferred management practices to reduce adverse effects. In addition, public and local government outreach allows for direct interactions between the regulators and regulated communities and, in the process, the development of a better understanding of each other. This objective ties in to the Overall Five-Year Plan Objective #1, and supports the NPS Program Plan Goals #3, “Coordinate with public and private partners in all aspects of the Program”, and #4, “Provide financial and technical assistance and education”.

Examples of activities listed in the 2003-2008 Five-Year Implementation Plan that address this objective include:

- Providing education and publications on conservation, restoration, and enhancement of wetlands and riparian areas.
- Developing technical assistance and training programs for project design.

**k) Broaden partnership, coordination, and public participation in streambank and wetland monitoring and restoration projects.**

Increased involvement of stakeholders in wetland projects enhances permitting expediency, reduces regulatory conflicts, minimizes resource wastes, develops a sense of public ownership, provides public education opportunities, and improves the acceptability of those projects to all parties involved. This objective ties in to the Overall Five-Year Plan Objectives #1 and #3, and supports the NPS Program Plan Goals #3, “Coordinate with public and private partners in all aspects of the Program”, and #4, “Provide financial and technical assistance and education”. Examples of activities listed in the 2003-2008 Five-Year Implementation Plan that address this objective include:

- Student urban and rural creek revegetation projects in Marina and Sonoma Counties.
- Participation in Bay Area Wetlands Planning and Monitoring Groups.
- Malibu Lagoon water quality and habitat enhancement project.

**l) Protect, enhance, and restore the natural functions of stream channels, floodplains, and riparian corridors in order to protect water quality from nonpoint source pollution.**

Several physical variables such as vegetated channel boundary, stream valley slopes, stream channel slopes and lengths, sediment loads, sediment sizes, discharges, roughness of the stream channel, and active channel widths and depths, need to exist in balance in order to preserve the stream/river system's beneficial functions, such as NPS pollution treatment. When the balance is disrupted, the streams are compelled to react and readjust, leading to excessive erosion or sedimentation, and thus exacerbating the NPS situation. The end results could be the smothering of benthic organisms, burying of fish-spawning areas, filling of downstream wetlands, introduction of exotic species, increases in water temperature, turbidity, nutrient loading, and biochemical oxygen demand, and a decrease in dissolved oxygen. Common channel destabilizing practices such as vegetation removal, channel widening and/or straightening, streambank armors, and channel grade control are often the primary culprits and need to be recognized and managed carefully. This objective ties in to the Overall Five-Year Plan Objective #1, and supports the NPS Program Plan Goals #2, "Target Program activities", and #5, "Implement Management Measures".

Examples of activities listed in the 2003-2008 Five-Year Implementation Plan that address this objective include:

- Establishing mitigation requirements and grant and loan project criteria for restoring and enhancing wetland and riparian resources.
- Creek revegetation in Marina and Sonoma Counties.
- Financial assistance for floodplain friendly management.
- Financial incentives to minimize channelization and channel hardening practices.

**APPENDIX IV**  
**COMMENT LETTERS (10) TO DRAFT FIVE-YEAR PLAN**  
**AND**  
**SWRCB RESPONSES**



ORGANIZED 1956

**CALIFORNIA  
MARINE AFFAIRS AND NAVIGATION CONFERENCE**

7172 REGIONAL STREET, PMB 299 ~ DUBLIN, CALIFORNIA 94568  
PHONE: (925) 828-6215 ~ FAX: (925) 396-6005 ~ E-MAIL: Cmanc2@aol.com ~ www.cmanc.com

**Public Agency  
Members**

*Contra Costa, County of  
Corte Madera, Town of  
Crescent City Harbor  
Eureka, City of  
Humboldt Bay Harbor  
Long Beach, Port of  
Los Angeles, County of  
Los Angeles, Port of  
Monterey, City of  
Morro Bay, City of  
Moss Landing Harbor  
Newport Beach, City of  
Noyo Harbor Dist.  
Oakland, Port of  
Oceanside, City of  
Orange, County of  
Oxnard Harbor Dist.  
Petaluma, City of  
Port Hueneme, City of  
Port San Luis Harbor  
Rancho Palos Verdes, City  
Redondo Beach, City of  
Redwood City, Port of  
Richmond, Port of  
Sacramento, Port of  
San Diego, Port of  
San Francisco, Port of  
San Leandro, City of  
San Mateo Co. Harbor  
San Rafael, City of  
Santa Barbara, City of  
Santa Cruz Port Dist.  
Santa Monica, City of  
Seal Beach, City of  
Sonoma, County of  
Stockton, Port of  
Suisun City, City of  
Vallejo, City of  
Ventura, County of  
Ventura Port Dist.*

August 4, 2003

Steve Fagundes, Chief  
NPS Program Implementation Unit  
State Water Resources Control Board  
1001 I Street, 15<sup>th</sup> Floor  
Sacramento, CA 95814

ROBERTA GOULART  
CHAIRMAN

LYN KRIEGER  
VICE CHAIRMAN

STACEY JONES  
TREASURER

LEONARD CARDOZA  
IMMEDIATE PAST CHAIRMAN

JAMES M. HAUSSENER  
EXECUTIVE DIRECTOR

Subject: Draft NPS Implementation Plan for Marinas and Recreational Boating

Dear Mr. Fagundes:

Thank you for the opportunity to comment on the Draft Nonpoint Source Program Implementation Plan for 2003-2008.

In Section V. B. II. Concerning the TMDLs, there is a reference that the TMDL implementation plans will utilize the Management Measures. Would you please be more specific as to how this will occur?

In Section V. B. III. There are comments concerning a marina and its relationship to the watershed it is within as well as the sources of pollutants that may enter the marina from the watershed. This recognition is appreciated.

In Section V. B. III.1. There is a comment Marinas are responsible for any oil contamination resulting from their facilities. Would you please be more specific as to what you are stating. As an example are marinas responsible for the oil coming out of a sunken vessel?

In Section V. B. VII. There is reference to the creation of objectives (VIII – XI). The objectives do not quantify or qualify the pollutants or the amount of pollution coming from marinas and recreational boating. Prior to the development and enforcement of standards, there needs to be an understanding of what are the pollutants at a marina, where they are coming from, what the ambient pollution levels in the water body are, and etc. This suggestion is similar to the approach being undertaken by the San Francisco Bay Conservation and Development Commission as outlined in Table V.

*The mission of C-MANC is to optimize maritime benefits by providing advocacy for the sustainable maintenance and improvements of California harbors, ports, coastal and navigation projects.*

In Table V. there are items that either don't directly belong within the Marinas and Recreational Boating aspect, such as cargo or cruise ship ballast water, or that cross several functional areas such as the plastics program and the TMDL for pathogens in Richardson Bay from marinas and urban runoff. There are several references to fuel docks and the "soon to be published" Underwriters Laboratories Standards. For the past several months I have tried to ascertain what the status of these Standards is. So I am not sure that they can be called "soon to be published."

An area that is lacking, in my mind, is the development of a statewide program on how to measure pollutants within a marina. There are numerous water quality studies underway by a variety of non-governmental and governmental organizations. Unfortunately, the data being collected by a museum in San Francisco for a marina in San Francisco Bay cannot be compared to the data collected by an institute in Washington for the very same marina. I urge the Statewide Interagency Coordinating Committee and the Marinas and Recreational Boating Workgroup to look at this issue and develop some standards of measuring pollutants in the water column and sediments at marinas so that the data collected can be compared with that collected at other marinas and in the open waters.

In the nine years since the State of California created Technical Advisory Committees concerning nonpoint source management in California, I believe there has been a steady decrease in pollutants released by recreational boating in California, due to the educational efforts and outreaches being made by a variety of dedicated individuals, associations, and governmental agencies.

Sincerely,



James M. Haussener  
Executive Director



Winston H. Hickox  
Secretary for  
Environmental  
Protection

# State Water Resources Control Board

## Division of Water Quality

1001 I Street, Sacramento, California 95814 ♦ (916) 341-5487  
Mailing Address: P.O. Box 2231, Sacramento, California 95812  
FAX (916) 341-5808 ♦ Internet Address: <http://www.swrcb.ca.gov>



Gray Davis  
Governor

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at [www.swrcb.ca.gov](http://www.swrcb.ca.gov).*

OCT 30 2003

Mr. James H. Haussener  
Executive Director  
California Marine Affairs and  
Navigation Conference  
7172 Regional Street, PMB 299  
Dublin, CA 94568

Dear Mr. Haussener:

### DRAFT CALIFORNIA NONPOINT SOURCE (NPS) PROGRAM FIVE-YEAR IMPLEMENTATION PLAN FOR MARINAS AND RECREATIONAL BOATING CATEGORY

Thank you for taking the time to review and provide comment on the Draft NPS Five-Year Implementation Plan (Draft Five-Year Plan). It is through your communications and others like yours, that a statewide understanding of the importance of NPS Program implementation can occur.

Our response to your comments specific to the Marinas and Recreational Boating category and any modifications that were made to address your concerns are provided below.

1. Comment – Section V.B.II. Please be more specific as to how total maximum daily load (TMDL) implementation plans will utilize the NPS Management Measures (MMs).

If water quality impairments in a TMDL listed waterbody are attributed to nonpoint sources of pollution, then applicable NPS MMs for the identified source(s) of NPS pollution will need to be included in the TMDL Implementation Plan. If a marina is located in an impaired water body that is targeted for TMDL development, and if the marina is considered a potential source of that pollution, then applicable Marina and Recreational Boating MMs and appropriate management practices would need to be included in the TMDL Implementation Plan. The specific MMs that would be used in the TMDL implementation process would be dependent upon the impairments and the NPS pollutants contributing to the impairments.

2. Comment – Section V.B.III. Appreciate recognition concerning a marina and its relationship to the watershed it is within as well as the sources of pollutants that may enter the marina from the watershed.

Comment accepted.

3. Comment – Section V.B.III.1 Marinas are responsible for any oil contamination resulting from their facilities. Wants more specificity as to responsibilities. As an example are marinas responsible for the oil coming out of a sunken vessel?

Under the federal Oil Pollution Act (OPA), any hazardous spill from a vessel must be reported by the owner of the vessel and vessel owners are responsible for any costs of a resulting environmental cleanup and any damage claims that might result from the spill. Marina owners are not responsible for oil coming out of a vessel for which they have no control. They are required by law to immediately report any observed oil spill or slick. Reports may be made by telephone to either the Governor's Office of Emergency Services at 1-800-OILS-911, or the California Department of Fish and Game Office of Spill Prevention and Response (OSPR) at 1-888-334-2258.

The following information will be added to Section V.B.III.1: The Department of Fish and Game Office of Spill Prevention and Response (OSPR) enforces the laws designed to prevent spills, dispatches units to respond to spills, and investigates spills. The OSPR maintains a 24-hour Communications Center headquarters in Sacramento. The Center has the responsibility of dispatching wardens to marine oil spills. Anyone seeing an oil spill or slick is required by law to report the sighting. Reports may be made by telephone to either the Governor's Office of Emergency Services at 1-800-OILS-911 or to OSPR at 1-888-334-2258.

4. Comment – Section V.B.II. The objectives do not quantify or qualify the pollutants or the amount of pollution coming from marinas and recreational boating. The commenter is concerned that the State will be engaged in standards development and enforcement before there is a concerted effort to determine what pollutants are present in the marina environment, where they are coming from, and the ambient pollution levels in the water body.

We acknowledge that it would be ideal to conduct baseline water quality assessments at marinas to define the extent of NPS pollution and the contribution attributable to the marinas and recreational boaters. Unfortunately, the State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCBs) do not have the staff or financial resources to assess the more than 600 marinas located in California.

We are aware of several efforts to quantify pollutants coming from marinas and recreational boating activities. San Francisco Bay Conservation and Development Commission (SFBCDC), in coordination with the San Francisco Bay RWQCB (SFB-RWQCB), is in the process of designing and implementing a marina water quality sampling program for San Francisco Bay. Also, Waterkeepers Northern California has received grant funding from the SWRCB to conduct a Green Marinas Project. Waterkeepers will be coordinating with the SFBCDC, the SFB-RWQCB, and the California Coastal Commission. One of the goals of

this project is to conduct ambient water quality monitoring to provide a broader assessment of pathogen problems by gathering baseline data and providing a relative assessment of pathogen sources. There are additional grant funded projects that could provide additional information about marina and boater pollution impacts, and more are expected in the future.

In addition, the San Diego RWQCB (SD-RWQCB), in response to their continuing water quality concerns in the harbors of the San Diego Region, is requesting the county, applicable cities, and port districts to propose and conduct a coordinated and comprehensive harbor water quality monitoring program for San Diego Bay, Mission Bay, Oceanside Harbor, Del Mar Boat Basin, and Dana Point Harbor.

More water quality assessments can be expected in impaired waters in response to the TMDL Program and preparation of TMDL Implementation Plans. Also, SWRCB's NPS Program staff is coordinating with the Surface Water Ambient Monitoring Program (SWAMP) to enhance water quality monitoring in support of the California NPS Program. Lastly, the Santa Monica Bay Restoration Project, Morro Bay National Estuary Program, Association of Monterey Bay Area Governments (created to safeguard the water quality of Monterey Bay and its tributaries), and other regional efforts should provide additional information that can be useful in quantifying the amount of pollution coming from marinas and recreational boating activities.

5. Comments - Table V. There are items that either don't directly belong within this category, such as cargo or cruise ship ballast water, or that cross several functional areas such as the plastics program and the TMDL for pathogens in Richardson Bay from marinas and urban runoff. There are several references to fuel docks and the "soon to be published" Underwriters Laboratories (UL) Standards. For the past several months I have tried to ascertain what the status of these standards is.

We agree that activities related to cargo or cruise ship ballast water do not belong within this category and have been removed from the Five-Year Plan.

We do not agree that the activity to coordinate efforts to reduce plastics pollution does not belong in this NPS category. What gets tossed overboard can have a deadly impact on marine life and cause problems for other boaters. Plastic is perhaps the most harmful of this trash, because it does not readily break down in nature. Every day, more and more plastic is accumulating in our oceans. Recreational boaters are one the groups that improperly disposes of plastic refuse. According to the Center for Marine Conservation, over 25,000 pieces of fishing line were collected from United States beaches during the 1996 annual beach cleanup, and at least 40% of all animal entanglements reported during the cleanups involved fishing line. Plastics pose a serious enough threat to the marine environment that, in 1987, Congress enacted the Marine Plastic Pollution Research and Control Act. This law prohibits the dumping of plastics in all United States waters and applies to all



watercraft – from the smallest recreational boat to the largest commercial ship. In addition, marinas are required to maintain adequate facilities for the disposal of refuse regulated under this act.

The activity related to the TMDL for pathogens in Richardson Bay from marinas and urban runoff, does have a place in the NPS Implementation Plan for this NPS Category. Impaired waters may include impacts from both point and NPSs. Therefore, the TMDL Program and the NPS Program are closely related and efforts of these programs need to be coordinated. A TMDL Implementation Plan developed to address a nonpoint pollution source will require implementation of NPS MMs and applicable management practices to address the impairment related to the NPS. Accordingly, the implementing RWQCB will want to include these activities in their five-year implementation plans for the NPS Program.

The effort by UL to publish standards (UL 2248: Marina Fuel Storage, Piping, and Dispensing System; and UL 2405: Aboveground Secondly Contained Piping for Flammable Liquids) had depended on a successful contract between UL and the SWRCB. Unfortunately, contract issues delayed the execution of this contract, and there is now some question regarding availability of funds, in view of State budget cutbacks. Therefore, we expect the timing of the publication of the standards to depend on when the contract could be executed. UL would publish the standards no sooner than May 2004. If you have questions about the standards for marina fueling facilities, please call Laura Chaddock of the SWRCB Division of Water Quality (DWQ) at (916) 341-5870.

6. Comment – Need to develop a statewide program on how to measure pollutants within a marina. Statewide Interagency Coordinating Committee (IACC) and the Marinas and Recreational Boating Workgroup needs to develop some standards of measuring pollutants in the water column and sediments at marinas so that data collected can be compared with that collected at other marinas and in the open waters.

Additional objectives have been added to the Five-Year Implementation Plan, including an objective to “continue to assess waterbodies, identify sources of NPS impacts from recreational boaters and marinas and increase inspections.”

The primary purpose of the Five-Year Plan, the IACC, and the Marinas and Recreational Boating Workgroup is to coordinate efforts, share information and encourage consistency in statewide NPS efforts. The SFBCDC provides regular updates to the Marinas and Recreational Boating Workgroup on their project, plus members of the State Workgroup participate on the SFBCDC’s Marina and Recreational Boating NPS Taskforce. It is expected that the information compiled from SFBCDC marina’s project will be useful for other agencies and RWQCBs in designing monitoring programs for marinas. It is important to note that this work is and will continue to be contingent upon available funding which requires State agencies to prioritize their resources. This may not be the highest priority for State agencies that are facing staffing and funding reductions.

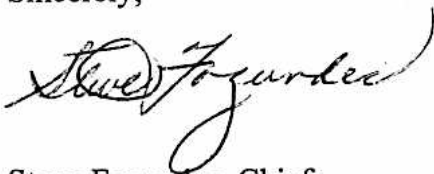
Another option for establishing baseline conditions within marinas is to consider the direction taken by the San Diego RWQCB. In response to continuing water quality concerns in the harbors of the San Diego Region, the RWQCB is requesting Orange County, the cities of San Diego and Oceanside, San Diego Unified Port District, and U.S. Marine Corps to propose and conduct a coordinated regional harbor monitoring program for San Diego Bay, Mission Bay, Oceanside Harbor, Del Mar Boat Basin, and Dana Point Harbor. The actual sampling, analysis, and reporting efforts will eventually track fishability and swimmability of harbor waters and measure trends in protection of beneficial uses. Participants are expected to include industrial, stormwater, and boating interests. A similar regional monitoring effort is underway in San Francisco Bay under a program administered by the San Francisco Estuary Institute.

Also, SWRCB's NPS Program staff is coordinating with the SWAMP to enhance water quality monitoring in support of the California NPS Program.

We commend your association's efforts to provide education and outreach to marina owners, operators and boaters. We also appreciate efforts made by marina owners and operators and recreational boaters to reduce the release of pollutants into State waters.

Thank you again for taking the time to review and comment on the Draft Five-Year Plan. It is through these communications and others like them, that a statewide understanding of the importance of NPS program implementation can occur. If you have any further questions, please do not hesitate to contact me at (916) 341-5487 of Diane Edwards of the NPS Program Plan Implementation Unit at (916) 341-5908.

Sincerely,



Steve Fagundes, Chief  
NPS Program Plan Implementation Unit

cc: Ms. Lisa Sniderman  
San Francisco Bay Conservation and  
Development Commission  
50 California Street, Suite 2600  
San Francisco, CA 94111

cc: Continued next page

Mr. James H. Haussener

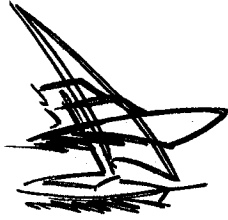
- 6 -

001 3 0 2008

cc: Continuation page

Ms. Dale Hopkins  
California Regional Water Quality  
Control Board, San Francisco Bay  
Region  
1515 Clay Street, Suite 1400  
Oakland, CA 94612

Mr. Bruce Posthumous  
California Regional Water Quality  
Control Board, San Diego Region  
9174 Sky Park Court, Suite 100  
San Diego, CA 92124-1324



**NORTHERN  
CALIFORNIA  
MARINE  
ASSOCIATION**

P.O. Box 1877 • San Leandro, CA 94577-0276  
Tel: 510-834-1000 • 800-834-1004 • Fax: 510-834-1076

August 11, 2003

Steve Fagundes, Chief  
NPS Program Implementation Unit  
State Water Resources Control Board  
1001 I Street, 15<sup>th</sup> Floor  
Sacramento, CA 95814

Subject: Draft NPS Implementation Plan for Marinas and Recreational Boating

Dear Mr. Fagundes:

Thank you for the opportunity to comment on the Draft Nonpoint Source Program Implementation Plan for 2003-2008. I am offering these comments on behalf of the Northern California Marine Association (NCMA), a non-profit trade association representing approximately 350 recreational marine businesses in Northern California.

In Section V.A. The bulleted items reference boat maintenance or repair yards. It should be emphasized that, in California—unlike the situation on the East Coast—marinas and boatyards are typically separate entities and are regulated under NPDES Stormwater regulations and permits to control pollution sources.

In Section V. B. II. The document states that the TMDL implementation plans will utilize the Management Measures. Which specific Management Measures will be used in the TMDL processes and in which impaired water bodies?

In Section V. B. III. The NCMA appreciates the comments concerning a marina and its relationship to the surrounding watershed and the fact that the watershed can serve as the source of pollutants that may enter the marina.

In Section V. B. III.1. In this section, OPA regulations are mentioned, but no mention is made of marine fuel dock inspections carried out by the Department of Fish and Game's OSPR office.

In Section V. B. VII. Following this section the document refers to the creation of objectives (VIII – XI). However, the objectives do not quantify or qualify the pollutants or the amount of pollution coming from marinas and recreational boating. The NCMA is concerned that the state will be engaged in standards development and enforcement before there is a concerted effort to determine what pollutants are present in the marina environment, where they are coming from, and the ambient pollution levels in the water body. What specific efforts will be carried out in these areas in this 5-year period?

In Table V. Several items in this section do not seem to belong within the Marinas and Recreational Boating chapter, for example the Kelp Restoration Project and the cargo or cruise ship ballast water projects. There are multiple projects dealing with bacteria contamination as well as a State Board project to develop an indicator test. Are these efforts coordinated? Will these various projects be using the newly developed indicator test?

I represented the NCMA on the original Marinas and Recreational Boating Technical Advisory Committee in 1994. The overwhelming consensus of the marina and boating representatives at that time was for a statewide program to establish baseline conditions for pollutants within a marina. That consensus continues to this date, and other than the BCDC pilot study in San Francisco Bay, such an effort still seems to be lacking. The Statewide Interagency Coordinating Committee and the Marinas and Recreational Boating Workgroup need to address this issue and to develop some standards for measuring pollutants in the water column and sediments at marinas so that the data collected can be compared with that collected at other marinas and in open waters.

Table V lists the various grants issued to governmental agencies and non-governmental organizations. I am familiar with several of these programs and am concerned with the apparent duplication among projects and with existing programs. I am also concerned that several of the organizations that have received funding are not very knowledgeable about marina operation or recreational boating. The success of these efforts depends on the buy-in of boaters and of the recreational marine industry. That buy-in is more difficult to obtain when the project sponsors do not understand recreational marine related issues. I urge the IACC and the Marinas and Recreational Boating Workgroup to seek the guidance of industry and boating stakeholders in the grant selection process.

In the past nine years, there has been a steady increase in environmental awareness by the recreational boating community. That awareness, evidenced by the educational efforts and outreach being made by a variety of dedicated individuals, associations, and

Steve Fagundes, Chief  
August 11, 2003  
Page 3

governmental agencies, has resulted in a steady decrease in pollutants released by recreational boating in California.

Sincerely,

A handwritten signature in black ink, appearing to read 'M'K Veloz', written in a cursive style.

(Ms) M'K Veloz  
Administrative Director



# State Water Resources Control Board



Winston H. Hickox  
Secretary for  
Environmental  
Protection

Division of Water Quality  
1001 I Street, Sacramento, California 95814 ♦ (916) 341-5487  
Mailing Address: P.O. Box 2231, Sacramento, California 95812  
FAX (916) 341-5808 ♦ Internet Address: <http://www.swrcb.ca.gov>

Gray Davis  
Governor

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at [www.swrcb.ca.gov](http://www.swrcb.ca.gov).*

OCT 30 2003

Ms. M'K Veloz  
Administrative Director  
Northern California Marine Association  
P. O. Box 1877  
San Leandro, CA 94577-0276

Dear Ms. Veloz:

## DRAFT CALIFORNIA NONPOINT SOURCE (NPS) PROGRAM FIVE-YEAR IMPLEMENTATION PLAN FOR MARINAS AND RECREATIONAL BOATING CATEGORY

Thank you for taking the time to review and provide comment on the Draft NPS Program Five-Year Implementation Plan (Draft Five-Year Plan). It is through your communications and others like yours, that a statewide understanding of the importance of NPS Program implementation can occur.

Our response to your comments specific to the Marinas and Recreational Boating Category and any modifications that were made to address your concerns are provided below.

1. Comment - Section V.A. The bulleted items reference boat maintenance or repair yards. It should be emphasized that in California – unlike the situation on the East Coast – marinas and boatyards are typically separate entities and are regulated under National Pollution Discharge Elimination System (NPDES) Stormwater regulations and permits to control pollution sources.

The referenced bulleted items clarify what operations and facilities are covered by the NPS Program's management measures (MMs) established for this NPS category. These are the same operations and facilities that are contained in the Plan for California's NPS Pollution Control Program, January 2001, that was approved by the U.S. Environmental Protection Agency and National Oceanic and Atmospheric Administration in July 2001. We agree to include additional clarification stating that "Typically, boat yards are separate entities from marinas and are regulated under National Pollutant Discharge Elimination system (NPDES) Stormwater regulations and permits to control point sources of pollution."

2. Comment – Section V.B.II. The document states that the total maximum daily load (TMDL) implementation plans will utilize the NPS MMs. Which specific MMs will be used in the TMDL processes and in which impaired water bodies?

*California Environmental Protection Agency*

If water quality impairments in a TMDL listed waterbody are attributed to NPSs of pollution, then applicable NPS MMs for the identified source(s) of NPS pollution will need to be included in the TMDL Implementation Plan. If a marina is located in an impaired water body that is targeted for TMDL development, and if the marina is considered a potential source of that pollution, then applicable Marina and Recreational Boating MMs and appropriate management practices would need to be included in the TMDL Implementation Plan. The specific MMs that would be used in the TMDL implementation process would be dependent upon the impairments and the NPS pollutant(s) contributing to the impairments.

3. Comment – Section V.B.III. Northern California Marine Association (NCMA) appreciates the comments concerning a marina and its relationship to the surrounding watershed and the fact that the watershed can serve as the source of pollutants that may enter the marina.

Comment accepted.

4. Comment – Section V.B.III.1 In this section, Oil Pollution Act (OPA) regulations are mentioned, but no mention is made of marine fuel dock inspections carried out by the Department of Fish and Game Office of Spill Prevention and Response (OSPR) office.

The following information will be added to Section V.B.III.1: The California Department of Fish and Game OSPR enforces the laws designed to prevent spills, dispatches units to respond to spills, and investigates spills. The OSPR maintains a 24-hour Communications Center headquarters in Sacramento. The Center has the responsibility of dispatching wardens to marine oil spills. Anyone seeing an oil spill or slick is required by law to report the sighting. Reports may be made by telephone to either the Governor's Office of Emergency Services at 1-800-OILS-911 or to OSPR at 1-888-334-2258.

In addition, to assist Small Craft Refueling Dock (a waterside operation, serving primarily small craft of less than 20 meters in length and less than five tons net weight) operators in their spill prevention and response efforts, OSPR conducts voluntary inspections to identify strengths and weaknesses in a system, and – when appropriate – show a dock operator ways to improve his/her ability to prevent and respond to spills. For more information on OSPR's outreach program go to <http://www.dfg.ca.gov/ospr>.

5. Comment - Section V.B.III. The objectives do not quantify or qualify the pollutants or the amount of pollution coming from marinas and recreational boating. The NCMA is concerned that the State will be engaged in standards development and enforcement before there is a concerted effort to determine what pollutants are present in the marina environment, where they are coming from, and the ambient pollution levels in the water body. What specific efforts will be carried out in these areas in this five-year period?



We acknowledge that it would be ideal to conduct baseline water quality assessments at marinas to define the extent of NPS pollution and the contribution attributable to the marinas and recreational boaters. Unfortunately, the State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCBs) do not have the staff or financial resources to assess the more than 600 marinas located in California.

We are aware of several efforts to quantify pollutants coming from marinas and recreational boating activities. San Francisco Bay Conservation and Development Commission (SFBCDC), in coordination with the San Francisco Bay RWQCB (SFB-RWQCB), is in the process of designing and implementing a marina water quality sampling program for San Francisco Bay. Also, Waterkeepers Northern California has received grant funding from the SWRCB to conduct a Green Marinas Project. Waterkeepers will be coordinating with the SFBCDC, the SFB-RWQCB, and the California Coastal Commission. One of the goals of this project is to conduct ambient water quality monitoring to provide a broader assessment of pathogen problems by gathering baseline data and providing a relative assessment of pathogen sources. There are additional grant funded projects that could provide additional information about marina and boater pollution impacts, and more are expected in the future.

In addition, the San Diego RWQCB (San Diego-RWQCB), in response to their continuing water quality concerns in the harbors of the San Diego Region, is requesting the county, applicable cities, and port districts to propose and conduct a coordinated and comprehensive harbor water quality monitoring program for San Diego Bay, Mission Bay, Oceanside Harbor, Del Mar Boat Basin, and Dana Point Harbor.

More water quality assessments can be expected in impaired waters in response to the TMDL Program and preparation of TMDL Implementation Plans. Also, the SWRCB's NPS Program staff is coordinating with the Surface Water Ambient Monitoring Program (SWAMP) to enhance water quality monitoring in support of the California NPS Program. Lastly, the Santa Monica Bay Restoration Project, Morro Bay National Estuary Program, Association of Monterey Bay Area Governments (created to safeguard the water quality of Monterey Bay and its tributaries), and other regional efforts should provide additional information that can be useful in quantifying the amount of pollution coming from marinas and recreational boating activities.

6. Comments - Table V. Several items in this section do not seem to belong within the Marinas and Recreational Boating chapter, for example the Kelp Restoration Project and the cargo or cruise ship ballast water projects. There are multiple projects dealing with bacteria contamination as well as a SWRCB project to develop an indicator test. Are these efforts coordinated? Will these various projects be using the newly developed indicator test?

We agree that the Kelp Restoration Project does not belong in the Marinas Section. It will be moved to the "Other Land Use Category" Section. The cargo/cruise ship ballast water project does not belong within the Marinas and Recreational Boating chapter and has been removed from the Five-Year Plan.

All of the projects listed in the NPS Plan dealing with bacteria contamination are proposed by various RWQCBS, typically for TMDL planning and implementation. The rapid water quality analytical test for measurement of indicator bacteria for human pathogens is being developed for RWQCB use and for Public Owned Treatment Works and County Environmental Health Agencies. The primary purpose is to provide a quick turnaround for determining the necessity of beach closures. Therefore, although the test will be available for RWQCB use, the RWQCBs may not use it if a quick turnaround is not necessary.

7. Comment – Table V. The overwhelming consensus of the marina and boating representatives is the need for a statewide program to establish baseline conditions for pollutants within a marina. The Statewide Interagency Coordinating Committee (IACC) and the Marinas and Recreational Boating Workgroup need to address this issue and develop some standards for measuring pollutants in the water column and sediments at marinas so that the data collected can be compared with that collected at other marinas and in open waters.

Additional objectives have been added to the Five-Year Implementation Plan, including an objective to "continue to assess waterbodies, identify sources of NPS impacts from recreational boaters and marinas and increase inspections."

The primary purpose of the Five-Year Plan, the IACC, and the Marinas and Recreational Boating Workgroup is to coordinate efforts, share information, and encourage consistency in statewide NPS efforts. The SFBCDC provides regular updates to the Marinas and Recreational Boating Workgroup on their project, plus members of the State Workgroup participate on the SFBCDC's Marina and Recreational Boating NPS Taskforce. It is expected that the information compiled from SFBCDC marina's project will be useful for other agencies and RWQCBs in designing monitoring programs for marinas. It is important to note that this work is and will continue to be contingent upon available funding which requires State agencies to prioritize their resources. This may not be the highest priority for state agencies that are facing staffing and funding reductions.

Another option for establishing baseline conditions within marinas is to consider the direction taken by the SD-RWQCB. In response to continuing water quality concerns in the harbors of the San Diego Region, the RWQCB is requesting Orange County, the cities of San Diego and Oceanside, San Diego Unified Port District, and U.S. Marine Corps to propose and conduct a coordinated regional harbor monitoring program for San Diego Bay, Mission Bay, Oceanside Harbor, Del Mar Boat Basin and Dana Point Harbor. The actual sampling,

analysis, and reporting efforts will eventually track fishability and swimmability of harbor waters and measure trends in protection of beneficial uses. Participants are expected to include industrial, storm water, and boating interests. A similar regional monitoring effort is underway in San Francisco Bay under a program administered by the San Francisco Estuary Institute.

Also, SWRCB's NPS Program staff are coordinating with the SWAMP to enhance water quality monitoring in support of the California NPS Program.

8. Comment - Table V. Concerned about apparent duplication among projects and with existing programs. Also concerned that several organizations receiving grants are not very knowledgeable about marina operation or recreational boating. Urges the IACC and the Marinas and Recreational Boating Workgroup to seek the guidance of industry and boating stakeholders in the grant selection process.

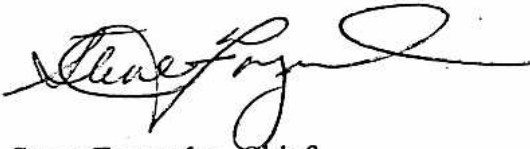
The California Environmental Protection Agency and the California Resources Agency have been in the process of developing a Watershed Management Strategic Plan (WMSP), pursuant to recommendations in a "Report to the Legislature As Required By Assembly Bill 2117". A key initiative in the WMSP is directed at the appropriate improvement and coordination of funding activities.

A recent Memorandum of Understanding (MOU) between these same agencies has been signed in order to improve integration and coordination of watershed policies, funding, and program implementation. Another product of the MOU is the California Watershed Council (CWC) which will serve in an advisory capacity to the WMSP Steering Committee. The first meeting of the CWC was held on August 28, and the interest among the attendees for improving bond-funded allocations was tremendous. This is becoming a valuable process and your input in the CWC is highly recommended. If you have any further questions about the WMSP or the CWC, please contact SWRCB Watershed Management Coordinator, Ken Coulter, at P. O. Box 100 Sacramento, CA 95812-0100 or [coulk@swrcb.ca.gov](mailto:coulk@swrcb.ca.gov). His telephone number is (916) 341-5486.

We appreciate the efforts of NCMA members in providing education and outreach to their marina owners and operators and to the boating public. The NCMA members play an important role in California in reducing pollutant released by marinas and recreational boaters.

If you have any further questions regarding the NPS Program Five-Year Implementation Plan, please do not hesitate to contact me at (916) 341-5487 or Diane Edwards of the NPS Program Plan Implementation Unit at (916) 341-5908.

Sincerely,



Steve Fagundes, Chief  
NPS Program Plan Implementation Unit

cc: Mr. Jack Gregg  
California Coastal Commission  
Water Quality Unit  
45 Fremont Street  
San Francisco, CA 94105-2219

Ms. Lisa Sniderman  
San Francisco Bay Conservation and  
Development Commission  
50 California Street, Suite 2600  
San Francisco, CA 94111

Ms. Dale Hopkins  
California Regional Water Quality  
Control Board, San Francisco Bay  
Region  
1515 Clay Street, Suite 1400  
Oakland, CA 94612

Mr. Bruce Posthumous  
California Regional Water Quality  
Control Board, San Diego Region  
9174 Sky Park Court, Suite 100  
San Diego, CA 92124-1324



**California Forestry Association**  
1215 K Street, Suite 1830  
Sacramento, CA 95814  
(916) 444-6592 fax (916) 444-0170  
e-mail: [cfa@cwo.com](mailto:cfa@cwo.com) web site: [www.foresthealth.org](http://www.foresthealth.org)

August 29, 2003

VIA EMAIL AND FIRST-CLASS MAIL

Mr. Steve Fagundes, Chief  
NPS Program Implementation Unit  
State Water Resources Control Board  
1001 I Street, 15th Floor  
Sacramento, CA 95814

Re: Comments of the California Forestry Association on Draft Nonpoint  
Source Five-Year Implementation Plan

Dear Mr. Fagundes:

We are submitting comments on the above-referenced document on behalf of the California Forestry Association (CFA). CFA strongly supports California's *Plan for California's Nonpoint Source Pollution Control Program* and the Fifteen-Year Program Strategy. In particular, CFA supports the Plan's emphasis on the development and implementation of Best Management Practices ("BMPs") as the principal means of addressing nonpoint sources of pollution associated with forestry operations, as well as the Plan's focus on developing programs to monitor the implementation and effectiveness of BMPs.

The central element of the Non-Point Source Plan is the "Three-tiered approach" to addressing nonpoint sources of pollution. Forestry BMPs are implemented and monitored through conditional waivers of waste discharge requirements and a Management Agency Agreement ("MAA"), which designated the Board of Forestry and Fire Protection and the Department of Forestry and Fire Protection as management agencies. Both conditional waivers of waste discharge requirements and MAAs with State agencies that have authority to develop and require implementation of BMPs are recognized as important tools in carrying Tier 2 of the Three-tiered approach, "Regulatory Based Encouragement of Management Practices."

CFA generally supports the Forestry Category Objectives summarized in the draft five-year plan, with the following comments:

Objective a) is to reduce interagency conflict and describes the development of a Monitoring Agreement MOU. We suggest that the final document acknowledge that a final MOU has been developed and executed in the past few months. That MOU has a series of dispute resolution provisions that should work to address and resolve differences among the Regional Board and

Department of Forestry staffs in the review of Timber Harvesting Plans. This MOU demonstrates that the nonpoint source program for forestry is dynamic and is readily adaptable to address issues that arise.

With regard to cumulative watershed effects, CFA supports the objective of improving upon the current process that is incorporated in the California Forest Practice Rules. We note that the program implements the requirements of the California Environmental Quality Act ("CEQA") as it defines and addresses cumulative effects. CFA believes that many existing conditions on the landscape are associated with legacy conditions that resulted from silvicultural and road building practices that have been replaced by BMPs incorporated into the Forest Practice Rules. The effects on water quality associated with these legacy conditions is a large factor in the Clean Water Act Section 303(d) Total Maximum Daily Load process—both as to the listing of water bodies as water quality impaired and the development and implementation of TMDLs themselves. We request that the discussion of means to evaluate what the draft five-year plan refers to as cumulative watershed effects acknowledge the challenge in the forestry context of addressing both CEQA cumulative effects as specifically required under CEQA and cumulative watershed effects as they are understood outside the CEQA context and from the perspective of legacy conditions.

Closely related is the issue of monitoring. We suggest that the Forestry Category Objectives include a restatement of one of the major purposes of monitoring in the nonpoint source pollution area: to ensure implementation and effectiveness of BMPs. CFA fully supports long-term trend and cumulative effects monitoring to evaluate the effectiveness of our forest practice rules and the Timber Harvesting Plan review process as BMPs. CFA seeks greater support for and the expansion of the Monitoring Study Group and its hillslope and instream monitoring strategy. CFA believes full implementation of this strategy is critical to having a science based adaptive process for protection of water quality and its beneficial uses. CFA requests that the Summary of Forestry Category Objectives acknowledge the role of the Monitoring Study Group, of which the State Water Board and the North Coast Regional Boards are members, and list the MSG as one means of implementing the listed objectives.

CFA believes it is important to recognize that the primary NPS pollution from silvicultural activities is sediment; geologists have estimated that the coast range would be tens of thousands of feet higher in elevation from plate tectonics if not for erosion/sedimentation. Of course, erosion and resulting sedimentation occur naturally, and sediment is always present in streams. Sediment provides both a necessary benefit (e.g. spawning gravel recruitment for anadromous fish) and a potential negative impact depending on the amount of sediment contributed and where in the stream it resides. The critical issue for NPS pollution objectives is to control amounts of human-caused sediment contributed to a stream that are outside the range of natural variability.

We appreciate the opportunity to comment on this important issue.

Sincerely,

***David Bischel***

David A. Bischel  
President



Winston H. Hickox  
Secretary for  
Environmental  
Protection

# State Water Resources Control Board

## Division of Water Quality

1001 I Street, Sacramento, California 95814 ♦ (916) 341-5487  
Mailing Address: P.O. Box 2231, Sacramento, California 95812  
FAX (916) 341-5808 ♦ Internet Address: <http://www.swrcb.ca.gov>



Gray Davis  
Governor

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at [www.swrcb.ca.gov](http://www.swrcb.ca.gov).*

REC 30 2003

Mr. David Bischel, President  
California Forestry Association  
1215 K Street, Suite 1830  
Sacramento, CA 95814

Dear Mr. Bischel:

### CALIFORNIA FORESTRY ASSOCIATION COMMENTS ON DRAFT NONPOINT SOURCE FIVE-YEAR IMPLEMENTATION PLAN

Thank you for taking the time to review and provide comment to the Draft Nonpoint Source (NPS) Five-Year Implementation Plan (Draft Five-Year Plan). It is of great value that your organization follows the progress of California's efforts on the NPS Program, and it is through your communications and others like yours, that a statewide understanding of the importance of NPS Program implementation can occur.

With this response, we would like to address the concerns expressed in your letter and hope this will further enhance your understanding of the NPS Program limitations and capabilities, as well as encourage your continued support.

Your letter suggests that the final Five-Year Implementation Plan should acknowledge that a final Memorandum of Understanding (MOU) between the Board of Forestry, the State Water Resources Control Board, and the Regional Water Quality Control Boards (RWQCBs) was developed and executed recently. You are correct that the signed MOU has a series of dispute resolution provisions that will help resolve differences between the RWQCBs and California Department of Forestry staffs in the review of Timber Harvest Plans. This acknowledgment will be added to the final Five-Year Implementation Plan.

There was also a reference to the problems that are posed by differences in interpretation of the concept of cumulative watershed effects. This is a matter that fits with the objective (b) for the Forestry NPS Category, which is to 'Develop or improve upon an effective, reliable, accepted approach for directly evaluating Cumulative Watershed Effects for Forest Management activities'. We appreciate your viewpoint on what this approach should be.

We agree that legacy problems are often major contributors to cumulative effects. We also acknowledge the need for more clarity regarding differences between "cumulative watershed

*California Environmental Protection Agency*

effects” as they are dealt with under the California Environmental Quality Act (CEQA), the Clean Water Act (CWA), and the State and federal Endangered Species Acts (ESAs). Under CEQA the watershed is seen from the limited perspective of each individual project and the public trust resources management goal is simply to avoid making things worse, if that is feasible. Under the CWA section 303(d) and the ESAs, a watershed is viewed independently of any project and the public trust resource management goal is to protect a resource where it is threatened and to help it recover where it is impaired or endangered. Confusion is compounded by the fact that CWA section 303(d) is primarily concerned with managing individual pollutants which can affect a multitude of species/beneficial uses of water, while the ESAs are primarily concerned with managing individual species which can be affected by a multitude of pollutants. As has been done in other western states, we hope to better integrate the various goals, perspectives, and approaches to minimize unnecessary regulatory confusion and duplication. An interagency group is currently considering both short-term and long-term approaches to improving evaluation and mitigation of cumulative effects.

We agree that the importance of monitoring is also critical to ensure implementation and to evaluate effectiveness of forestry management measures and management practices. The Five-Year Plan has many listed activities that will address monitoring, listed both in Section I, as well as in Section II (Forestry Category). An interagency group is currently considering how to ensure that appropriate monitoring is conducted and how to best intergrate monitoring programs and results of the agencies and the private sector.

Thank you again for your thoughtful suggestions and comments to the Draft Five-Year Plan. We hope that this letter confirms the fact that we understand your concerns, and feel that the topics will be addressed through the NPS Program implementation process. We further encourage you to continue your communications with our NPS Program staff and to continue to participate in water quality protection through appropriate administrative and legislative venues that will confirm the importance of an effective NPS Program in California.

If you have any questions, please do not hesitate to contact me at (916) 341-5487 or Margie Lopez Read of the NPS Program Plan Implementation Unit at (916) 341-5533.

Sincerely,



Steve Fagundes, Chief  
NPS Program Plan Implementation Unit



OCT 30 2003

Mr. David Bischel

- 3 -

cc: Mr. Sam Ziegler  
Water Division, WTR-3  
United States Environmental Protection  
Agency, Region IX  
75 Hawthorne Street  
San Francisco, CA 94105

Mr. Al Wanger  
California Coastal Commission  
45 Fremont Street  
San Francisco, CA 94105



August 29, 2003

Margie Lopez Read  
State Water Resources Control Board  
Water Quality Division  
1001 I Sreet, 15th Floor  
Sacramento, CA 95814

**VIA EMAIL:** readm@swrcb.ca.gov

**Re:** Comments on the "Draft California Nonpoint Source Program Five-Year Implementation Plan" (July 2003).

Dear Ms. Read:

Thank you for the opportunity to review and provide comments on California's Draft Nonpoint Source Five-Year Implementation Plan (NPSIP). As you know, we have closely followed the progress of California's efforts on the Nonpoint Source Pollution Control Program since 1994, and have great interest in its implementation. We appreciate the substantial amount of time and effort that you and your staff have put into the development of this plan.

Nonpoint source pollution has overtaken point source pollution as the single greatest threat to the quality of California's waters. According to EPA, 54 percent of California's polluted waterways are contaminated only by non-point sources, and another 45 percent are polluted by a combination of point and nonpoint sources.<sup>1</sup> Consequently, it is critically important that California develop a plan that, when implemented, will be effective in "reduc[ing], to the maximum extent practicable, the level of pollution resulting from [each category and subcategory of nonpoint sources]."<sup>2</sup>

We are concerned that the NPSIP is not a plan that is capable of meeting these objectives. In fact, the NPSIP is really more of a "catalogue" than a "plan" at all. A plan is "a carefully arranged and systematic program of action for attaining some object."<sup>3</sup> Accordingly, a plan has concrete objectives. A plan has a schedule for meeting its objectives. A plan sets forth actions that are clearly designed for the attainment of those objectives, rather than actions that might (as a side-effect) produce some movement toward them.

The NPSIP, which should be designed to meet both CWA Section 319<sup>4</sup> and CZARA Section 6217(g)<sup>5</sup> mandates,<sup>6</sup> does not exhibit any of these characteristics. The

---

<sup>1</sup> Joint EPA and DOJ Press Release, Federal Court Issues Landmark Clean Water Decision (April 5, 2000), available at <http://www.epa.gov/owow/tmdl/pronsdecision.html>.

<sup>2</sup> 33 U.S.C. § 1329(a)(1)(C).

<sup>3</sup> Webster's New Universal Unabridged Dictionary, Deluxe Second Edition (1972).

<sup>4</sup> 33 U.S.C. § 1329.

NPSIP lacks concrete objectives, lacks a clear schedule for implementation, lacks milestones by which to track implementation, and fails to demonstrate how the actions undertaken will result in achievement of plan objectives. **These omissions are particularly egregious in light of the opportunities currently provided by the bond measures and nascent efforts to improve programs to control polluted runoff from agriculture and silviculture operations.** We request that the state revise the NPSIP to address these concerns, along with several miscellaneous concerns, all of which are described in more detail below.

### California's Plan Lacks Concrete Objectives

As noted above, California's plan is intended to meet both CWA and CZARA requirements. CWA Section 319 is clear about the goals of a nonpoint source management program: such a program will "control[] pollution added from nonpoint sources to the navigable waters of the state,"<sup>7</sup> and "provide for utilization of best management practices at the earliest possible date."<sup>8</sup> CZARA, similarly, is clear about the goals of a nonpoint source management program: such a program must be designed to "achieve and maintain applicable water quality standards under section 303 of the Federal Water Pollution Control Act (33 U.S.C. 1313) and protect designated uses."<sup>9</sup> Even EPA's "Nine Key Elements of an Effective State Program" are clear: such a program must be "designed to achieve and maintain beneficial uses of water."<sup>10</sup> In sum, the program's goals should be to control nonpoint source pollution through best management practices in order to meet water quality standards and beneficial uses.

In contrast, the stated goals of the NPSIP are to:

1. Promote the implementation of management measures and related practices by all levels of water quality managers (federal, State, watershed groups and other stakeholders);
2. Preserve water quality in water bodies that are currently meeting California water quality standards and protect them from future degradation from the impacts of nonpoint source pollution;
3. Promote the implementation of management measures and use of management practices for the NPS component of TMDLs or in 303(d) listed water bodies;
4. Promote better leverage of inter-agency and private entity resources for NPS programs.

---

<sup>5</sup> 16 U.S.C. § 1455b(g).

<sup>6</sup> NOAA/EPA, Decisions on Conditions of Approval – California Coastal Nonpoint Program (July 2000), available at [http://coastalmanagement.noaa.gov/pdf/6217ca\\_fnl.pdf](http://coastalmanagement.noaa.gov/pdf/6217ca_fnl.pdf).

<sup>7</sup> 33 U.S.C. § 1329(b)(1).

<sup>8</sup> *Id.* at § 1329(b)(2)(D).

<sup>9</sup> 16 U.S.C. § 1455b(b)(3).

<sup>10</sup> United States Environmental Protection Agency, "Nonpoint Source Program and Grants Guidance for Fiscal Year 1997 and Future Years" (May 1996), available at <http://www.epa.gov/OWOW/NPS/guide.html>.

This is a classic example of failing to see the forest for the trees. First, the promotion of management measures – a central element of two of the listed objectives – is a tool or a means, rather than a goal. In order to be effective, the plan needs to ensure that its statement of objectives conforms to the simple and intuitive goals set forth in the program guidance: **to implement best management practices in order to achieve water quality standards**. This goal must be the driving force behind the NPSIP.

### California's Schedule for Implementation Is Vague and Lacks Reasonable Milestones

The NOAA/EPA joint “Coastal Nonpoint Program Development and Approval Guidance” requires that the State program “[i]nclude a schedule for each nonpoint source category or subcategory with milestones for achieving full implementation of the management measures within three years . . . .”<sup>11</sup> Furthermore, the guidance provides that “[t]he state coastal nonpoint program should include milestones established at appropriate intervals within the . . . implementation period, by which progress toward full implementation can be assessed . . . .”<sup>12</sup> Finally, the California Legislature has repeatedly demanded that the state prepare detailed objectives and milestones for this program.<sup>13</sup> These requirements reflect the fact that a plan to ensure implementation of the management measures would be deficient without clear timetables for completion of activities.

The plan's conception of what constitutes a “schedule” and “milestones” is sweeping to the point of being essentially unusable for purposes of ensuring plan implementation and allowing for enforcement. A majority of the activities listed in the document are associated with schedules that span the entire life of the five-year plan. While it is conceivable that some of these activities are ongoing and will occur throughout the life of the plan (*e.g.* training activities), other activities can and should be completed in a more discrete period, and the plan should include milestones for determining progress toward the objective of the activity (*e.g.* NPDES Stormwater Program Efforts).<sup>14</sup> Moreover, numerous activities appear to be scheduled to terminate before they begin; 18 activities listed in the document have start dates that are later than their end dates.

In addition, it is virtually impossible to determine the stage of implementation for each activity. According to the California's original Nonpoint Source Control Program Strategy and Implementation Plan:

Seven process elements are prescribed for each of the management measure categories. They are to: (1) assess problems; (2) target resources; (3) plan activities; (4) coordinate with agencies and the public; (5) implement management

---

<sup>11</sup> National Oceanic and Atmospheric Administration and Environmental Protection Agency, “Coastal Nonpoint Program Development and Approval Guidance” (January 1993) (hereinafter NOAA/EPA Guidance), at 17.

<sup>12</sup> *Id.* at 36.

<sup>13</sup> SB 499 (1997) and SB 1453 (1998) (Alpert).

<sup>14</sup> Draft Nonpoint Source Five-Year Implementation Plan, 2003-2008 (July 2003) (hereinafter NPSIP), Urban Category, at 43.

measures; (6) track and monitor actions; and (7) report on the effectiveness of the Program Plan. These steps are essential to ensuring effective and efficient implementation of the management measures which will enable the Strategy to achieve the defined goals of preventing and controlling NPS pollution.

The NPSIP inexplicably condenses these “essential steps” into two general designations – “pre-implementation” and “implement” – for the purposes of this report. The seven process elements, if employed, would serve as natural milestones toward completion of a management activity. Planning and scheduling based on these elements would help to narrow the scope of activities that are often impossibly broad. By disposing of these process elements, the state not only obfuscates any review of its progress by the public, but also complicates its own planning efforts by failing to divide activities into manageable components.

#### It Is Unclear How the Management Activities Listed in California’s Plan Will Result in Implementation of Management Measures

The various federal guidance documents give states a great deal of latitude in selecting management activities that will implement the management measures. However, explicit in this grant of discretion is the requirement that the activities “will achieve the level of control specified in the management measure.”<sup>15</sup> According to the NOAA/EPA guidance, the states are required to provide a great deal of detailed information in order to demonstrate how the activities listed will result in achievement of the management measures, including the mandate that the states: “[i]dentify enforceable policies and mechanisms to ensure that each management measure identified in the coastal nonpoint program is implemented in accordance with . . . this guidance.”

The NPSIP contains approximately 183 pages worth of management activities, arranged by management measure within each land use category. However, very few management activities appear to be designed specifically to promote the goals of any management measure, leaving the reader to speculate as to how the activity might do so. In addition, no management activity contains a description of how it might result in the implementation of the management measure it is associated with.

We believe that it is inappropriate for the state to rely entirely – or even largely – on pre-existing management practices to implement the management measures and the goals of this program. The NPSIP is largely a catalogue of pre-existing nonpoint source pollution and stormwater control programs. If existing activities were adequate to control nonpoint source pollution, there would be no need for the NPSIP. The evidence contained in California’s section 303(d) list – containing scores of water bodies impaired by nonpoint source pollution – amply demonstrates this need. The state’s plan should include new and creative strategies for solving this persistent problem and should be linked directly to nascent efforts to control polluted runoff in the wake of SB 390 (Alpert, 1999).

---

<sup>15</sup> Environmental Protection Agency, Management Measures Guidance – Fact Sheets, *available at* <http://www.epa.gov/owow/nps/mmgf>.

In particular, the state should take this opportunity to abandon pre-existing failed programs – like ineffective waivers of waste discharge requirements for agriculture and timber – that inhibit implementation of the goals of this program, and instead describe how agriculture and timber management measures in the NPSIP will be implemented under new regulatory regimes being examined. According to the Nine Key Elements, the state must “manage[] and implement[] its nonpoint source program efficiently and effectively. . . solv[ing] its water quality problems as effectively and expeditiously as possible.”<sup>16</sup> Thus, the state should reject approaches that, in fact, contribute to the need for additional measures to reduce nonpoint source pollution, such as the waivers of waste discharge requirements for agriculture and timber adopted by the regional boards to date. Although the state has a great deal of flexibility in choosing how to implement management measures, it may not adopt management activities that will exacerbate the problem. Rather, the state should promptly undertake to develop waste discharge requirements as appropriate for these categories, and to carefully tailor any use of waivers to ensure that they will effectively and expeditiously improve water quality in water bodies affected by nonpoint source pollution.

Whether the state uses existing programs or new programs designed to implement management measures, it must nevertheless “describe the process by which it will ensure the implementation of the management measures.”<sup>17</sup> California’s document provides not the slightest hint of a description this process. The state has produced a rather thick and impenetrable list of management activities, and left the reader – and thus the reviewing agency – to guess what these activities are proposed to accomplish. The NPSIP should be revised to provide detailed descriptions of how each management activity will contribute to the implementation of a management measure, and should include a detailed discussion of how it plans to use waste discharge requirements – and, as appropriate, waivers – to implement management measures and achieve the ultimate goal of clean water.

Lastly, the NPSIP was not created out of whole cloth. In evaluating the usefulness of proposed management activities, it is essential to assess the successes and shortcomings of the first Five-Year Implementation Plan (1998-2003) – both overall and with respect to each management measure. How many management measures and management practices were implemented through that plan? What were the effects on water quality? How has the success or failure of particular management activities shaped the current plan? Because it does not address these questions, the NPSIP appears to be wholly disconnected from any previous efforts in that. The document should be revised to report on the outcome of the first Five-Year Implementation Plan, both generally and with reference to specific management measures and activities.

---

<sup>16</sup> See *supra* note 8.

<sup>17</sup> NOAA/EPA Guidance at 11.

## Miscellaneous Concerns

- The plan released for public review does not contain any information on how agriculture management measures will be implemented. It repeatedly refers to Table IIB (which purports to contain agriculture-related management activities), but there is no Table IIB in the document. A complete description of how the agriculture management measures will be implemented must be included in the NPSIP. This description must of necessity include a discussion of how new agriculture waste discharge requirements and waivers will ensure implementation of the management measures.
- The NPSIP does not include provisions for implementation of the Wetlands Forest Management management measure, within the Forestry category. “[S]tate management measures [must be] in conformity with those measures specified in the (g) guidance. A state management measure is ‘in conformity with’ those specified in the (g) guidance if it is identical to, or is demonstrated to be as effective as, the (g) guidance measures.”<sup>18</sup> The NPSIP does not provide any explanation for the omission of this management measure except to state that “many of the activities consist of an overall planning and implementation effort intended to address ‘All’ of the Forestry management measures, including Wetlands Forest Management.”<sup>19</sup> There has been no demonstration that these activities will implement the Wetlands Forest Management management measure, nor that they will provide for the implementation of a management measure that is as effective as the Wetlands Forest Management management measure. We therefore request that the state develop plans to implement the Wetlands Forest Management management measure.
- The Streamside Management Areas management measure, also within the Forestry Category, is also not implemented by any of the activities set forth in the document. “This management measure establishes areas along surface waters that are managed to protect the water quality of the adjacent water body.”<sup>20</sup> The document describes five activities that it says will “advance” this management measure, but none of them actually establishes or provides a procedure for the establishment of a SMA.
- Both CZARA Section 6217<sup>21</sup> and the Nine Key Elements require the state to improve agency coordination. Clear agency commitments are required where the program identifies certain agencies as having authority over a management measure or activity. The document lists “Interagency Coordination” as a management activity in the All or Multiple Land Use Categories section, with a schedule for completion of 7/1/02 to 1/10/03. It is unclear, however, whether signed MOUs or Interagency Agreements have, in fact, been obtained in accordance with this schedule or whether a specific staffer has been assigned to coordinate agencies on NPS issues. As these are the explicit success criteria for

---

<sup>18</sup> NOAA/EPA Guidance at 12-13.

<sup>19</sup> NSIP at III (Forestry Category).

<sup>20</sup> Environmental Protection Agency, Management Measures Guidance – Forestry Fact Sheet, *available at* <http://www.epa.gov/owow/nps/mmgf>.

<sup>21</sup> 16 U.S.C. § 1455b(b)(6).



this management activity, the document should provide a status report. In any event, the document should discuss in detail the level of commitment of the various identified agencies to the program and the authorities that they might use to implement specified management measures.

- Finally, **the NPSIP makes no reference to how the state intends to use the substantial funds available through Propositions 40 and 50 to implement management measures or undertake specific management activities.** These bond measures demonstrate the public’s strong desire for progress toward the goal of clean water in California. The public has a right to a plan that deliberates the effective use of these funds and to a process for accounting for how – and to what effect – this money is used.

\* \* \* \* \*

The State Board has a unique opportunity to develop a five-year implementation plan that will provide real direction for statewide efforts to address nonpoint source pollution. We believe the suggestions provided herein will help the Board seize this opportunity, and can be integrated into the document with a reasonable amount of time and effort.

Thank you for your careful consideration of these comments. If you have any questions, please do not hesitate to call.

Sincerely,

Linda Sheehan  
Director, Pacific Regional Office  
The Ocean Conservancy

Bill Jennings  
DeltaKeeper  
WaterKeepers Northern California

Zeke Grader  
Executive Director  
Pacific Coast Federation of  
Fishermen’s Associations

Barbara Vlamis  
Executive Director  
Butte Environmental Council

Alan Levine  
Executive Director  
Coast Action Group

Bruce Reznik  
Executive Director  
San Diego BayKeeper

Sujatha Jahagirdar  
Clean Water Advocate  
Environment California

Susan Jordan  
Director of Gov’t Affairs  
California CoastKeeper

cc: Alexis Strauss, U.S. EPA Region IX  
Arthur Baggett, Jr., SWRCB  
Celeste Cantu, SWRCB



Winston H. Hickox  
Secretary for  
Environmental  
Protection

# State Water Resources Control Board

## Division of Water Quality

1001 I Street, Sacramento, California 95814 ♦ (916) 341-5487  
Mailing Address: P.O. Box 2231, Sacramento, California 95812  
FAX (916) 341-5808 ♦ Internet Address: <http://www.swrcb.ca.gov>



Gray Davis  
Governor

OCT 30 2003  
*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at [www.swrcb.ca.gov](http://www.swrcb.ca.gov).*

Ms. Linda Sheehan, Director  
Pacific Regional Office  
The Ocean Conservancy  
116 New Montgomery Street  
San Francisco, CA 94105

Dear Ms. Sheehan:

### OCEAN CONSERVANCY COMMENTS ON THE "DRAFT CALIFORNIA NONPOINT SOURCE PROGRAM FIVE-YEAR IMPLEMENTATION PLAN", JULY 2003

Thank you for taking the time to review and provide comment to the Draft Nonpoint Source (NPS) Five-Year Implementation Plan (Draft Five-Year Plan). We appreciate your organization's involvement and support of California's efforts on the NPS Program. It is through your communications and others like yours, that a statewide understanding of the importance of NPS Program implementation can occur.

Your letter expressed the necessity for the development of a 'plan', which will include 'concrete objectives', 'a schedule for meeting its objectives', and 'actions that are designed for the attainment of those objectives.' Your comment indicates that the format of the Draft Five-Year Plan did not sufficiently identify where these elements are currently included.

In fact, the Draft Five-Year Plan focused on meeting the scheduled goals of the NPS Program, on the development of plan objectives, and on describing actions for the attainment of those objectives utilizing a collaborative effort, with interagency input from 28 State departments, boards, and commissions. It is important to note that the NPS Program was designed to utilize the varied and independent authorities of the individual State agencies to address NPS pollution. As such, our planning effort was directed towards the most effective use of these available authorities, tools, and resources to address NPS pollution in a comprehensive and coordinated fashion.

As a result of your correspondence, some changes were made to the Draft Five-Year Plan. The discussion below is intended to clarify the intent of the Draft Five-Year Plan and identify the modifications that were made to address your concerns.

#### 1. "The NPSIP is really more of a 'catalogue' than a 'plan' at all." and "California's Plan lacks concrete objectives."

The Draft Five-Year Plan tables do intentionally serve a 'catalogue' function, identifying actions that will be taking place over the next five years that have an impact on controlling

NPS pollution. Although your letter indicates that you feel this is inappropriate, it was in fact, a deliberate effort geared toward defining the universe of NPS activities among the 28 State agencies that were involved in the Draft Five-Year Plan development. The tables are actually reports from a searchable, interactive database, which is an effective tool enabling multiple agencies to determine where collaboration and consolidation of their respective activities and initiatives are feasible. This tool is valuable for all of the NPS implementing agencies, particularly in this era of budget cutbacks and declining State funds and staff to implement their programs.

Your comment on page 3 of your letter critiques that “the promotion of MMs – a central element of two of the listed objectives – is a tool or a means, rather than a goal.” This comment that the objectives are ‘tools’ is in fact correct, as our Draft Five-Year Plan includes objectives to meet the goals of the *Plan for California’s NPS Pollution Control Program* (NPS Program Plan). The Draft Five-Year Plan objectives are intended to be guided ‘tools’ that will help meet the overall program goal of management measure (MM) implementation by 2013.

Based on your comment, we decided to reiterate the details of the NPS Program Plan goals in the Five-Year Plan. Therefore, the related excerpt from Volume I of the NPS Program Plan has been added to the Introductory Section B.1. of the Draft Five-Year Plan.

The specific objectives that are listed in the Draft Five-Year Plan for the period 2003-2008 will put the State in good standing with respect to the overall NPS Program goals. There are seven sets of objectives for the next five-year period with one set pertaining to the overall Draft Five-Year Plan, which you quoted in your letter. Additionally, there is a set of specific objectives relating to each of the six NPS land use categories (Agriculture, Forestry, Urban, Marinas, Hydromodification, and Wetlands).

Based on your comments, we have revised the Draft Five-Year Plan by adding Appendix III which more clearly describes the intent of the objectives and provides examples of the type of activities included in the Five-Year Plan designed to achieve the objectives.

It is important to note that the tables provided in the Draft Five-Year Plan are merely a summary report which lists some of the information within the newly developed database for the NPS Program. This database was designed for the express purpose of including more comprehensive, searchable information for each MM, including NPS related activities, affected watersheds, partner agencies, pollutants of concern, deliverables, schedules, and funding sources (if they are known). This quantity of information is burdensome to provide in its entirety in one report to the general public. Now that the database will be available to them, State agencies can more quickly compare and coordinate activities, and evaluate collaborative opportunities to more efficiently utilize resources to achieve water quality protection objectives.

**2. "California's schedule for implementation is vague and lacks reasonable milestones."**

The Draft Five-Year Plan contains many schedules for implementation, embedded at all levels from NPS Program Plan to individual activity schedules. As discussed in the Final Five Year Plan Introduction, the primary scheduled goal is for full implementation of the 61 MMs identified in the NPS Program Plan by the year 2013. For the period between July 2003 and June 2008, the State will report, through the biennial progress reports of 2005 and 2007, it's progress in achieving the Five -Year Plan objectives, which are the tools for meeting the NPS Program Plan goals. Additionally, each of the activities that are listed in the plan has it's own schedule for completion. For the first time, the State will be able to utilize it's NPS database to develop information for the biennial progress reports on the status of meeting those multiple schedules and multiple deliverables.

We agree that the Five-Year Implementation Plan should have "detailed objectives and milestones" concerning both the implementation of MMs and the amelioration of impairments in water quality. In order to establish scientifically defensible and practical numerical goals for the NPS Program, the existing "universe" of water quality problems resulting from NPS and the current implementation of MMs/management practices (MPs) and resulting improvements in water quality must be determined. Once existing conditions are determined, watershed-specific NPs implementation programs need to be developed that establish specific goals and time schedules to implement MMs/MPs and document resulting improvements in water quality.

To this end, the NPS Program is in the process of developing strategies for NPS-related water quality monitoring and MM/MP implementation tracking. A key element in both of these strategies is the *Policy for Implementation and Enforcement of the NPS Pollution Control Program* (NPS Policy), which is scheduled to be released in early 2004. The NPS Policy is designed to establish the framework for NPS implementation programs that are sufficient to meet the Regional Water Quality Control Board's (RWQCBs) obligations to protect water quality. These implementation programs will require water quality monitoring and MM/MP implementation tracking. Used in coordination with other RWQCB efforts (e.g., total maximum daily load, waste discharge requirements [WDRs], and wavier of WDRs) reasonable numerical goals can be established and evaluated on a local, RWQCB, and statewide basis.

**3. "The [Draft Five-year Plan] inexplicably condenses these [process elements] into two general designations – 'pre implementation' and 'implement'."**

During the development of the current Five-Year Plan, we were faced with the choice of listing the same activity multiple times, under different, though related, process elements or consolidation of the process elements so that the number of times an activity was listed was reduced. We chose the latter.

Discussions with the various agencies, boards, and departments revealed that the process elements as defined were not useful when described as discrete elements since most planning efforts already incorporated more than one process element (assess problems, target resources, or plan activities) into a particular activity. We believe that it made sense to combine these 'pre-implementation' process elements and describe particular tasks related to these process elements in the activities themselves, rather than creating duplicative 'artificial activities' consisting of subtasks related only to the individual process elements. Additionally, for purposes of database development, usability, and tracking activity implementation, this approach significantly reduced redundancy and over-reporting of activities.

**4. "It is unclear how the management activities listed in California's plan will result in Implementation of management measures"**

The activities are listed in order of the land use category and MM to which they pertain, or for which they were specifically designed to address. We believe that the brief summaries provided by each agency which identify the specific activity, its objective, description, and success criteria, *do* express support of the specific MM, although some agencies were able to explain this more specifically than others.

Appendix II of the Five-Year Plan also provides more specific information regarding most MMs for the NPS Program, and this might help you further understand the relationship between activities and MMs.

Because there are more than 1000 listed activities, the level of detail for each description is limited by our necessity to provide a plan summary. Further expansion of each activity would create a Five-Year Plan document that would be unduly burdensome to review. We recommend that if you are interested in a particular land use category, MM, agency, or specific activity that you contact one of the following individuals, who can further help you with your questions:

Agriculture: Jessie Maxfield, SWRCB, 916-341-5484

Forestry: Margie Lopez Read, SWRCB, 916-341-5533

Urban: Derek Lee, California Coastal Commission (CCC), 415-904-5270 or  
Margie Lopez Read, SWRCB

Marinas: Diane Edwards, SWRCB, 916-341-5908

Hydromodification: Diane Edwards, SWRCB

Wetlands: Derek Lee, CCC

Overall: Margie Lopez Read, SWRCB

5. **“Whether the state uses existing programs or new programs designed to implement management measures, it must nevertheless ‘describe the process by which it will ensure the implementation of the management measures.’”**

As discussed in the response to Comment 2, the State is developing the NPS Policy, the purpose for which is to describe the process that will ensure implementation of the MMs. Your letter points to the necessity of providing a description of the NPS Policy in the Five-Year Plan. This description has now been added to the final Five-Year Plan, in Section I, Introduction.

6. **“Lastly,..In evaluating the usefulness of proposed management activities, it is essential to assess the successes and shortcomings of the first Five-Year Plan (1998-2003) – both overall and with respect to each management measure.”**

Your comment here is absolutely correct, and we concur. In fact, the review of the progress of the first Five-Year Plan began in February 2002, for the specific purpose of assessing its successes and shortcomings and to develop the second Five-Year Plan. This review was conducted by the 28 different implementing State agencies, which were also involved in the preparation of the Draft Five-Year Plan. The progress review, otherwise known as the Biennial/Five-Year Progress Report (Progress Report), will be released approximately at the same time as the final Five-Year Plan is submitted to United States Environmental Protection Agency (U.S. EPA) and National Oceanic and Atmospheric Administration (NOAA).

## 7. **Miscellaneous Concerns**

Agriculture Category - Per your recommendation, a greater clarification of the relevance of the waste discharge requirements and waivers to ensure MM implementation in all categories, including Agriculture, has been added to the Introduction in the final Five-Year Plan (NPS Policy).

Wetlands Forestry Management - The Wetlands Forestry Management MM does not have specific activities that are listed under this MM, although as you have noted, there are multiple activities in the All Forestry MMs table that do address Wetlands Forestry Management which is in conformance with the NOAA/EPA (g) guidance.

Very few wetlands forests exist in California, and those that do are rarely available for logging. This particular MM is more pertinent to other States in the nation (e.g., Florida and Minnesota) that have an abundance of forests nested in wetlands. The wetland forests that do exist in California are generally State or federal parks, and commercial logging activities are banned in these areas. In addition, the State’s Forest Practice Rules prohibit or minimize commercial timber operations (especially heavy equipment operations) in marshes, wet meadows, and other wet areas. For these reasons the listing of activities that apply to this MM are more general, and are listed in the “All Forestry MMs” section of the table.

Streamside Management Areas (SMA) for Forestry - There are a number of activities in the Draft Five-Year Plan that will address this particular Forestry MM – the five activities that you mention in your letter, as well as the activities that address All Forestry MMs. Your letter expresses a particular concern that the activities in the Five-Year Plan do not “establish or provide a procedure for the establishment of a SMA”. This procedure is set forth in detail in the State’s Forest Practice Rules, referred to as a Watercourse and Lake Protection Zone. How well this is accomplished with respect to water quality is a topic for discussion in the Progress Report.

Interagency Coordination – There is no question that improvements in interagency coordination for NPS implementation are valuable and necessary to the program. This is an effort that is not without challenges, although it has been and will be taking place on many levels, including the development of Memorandums of Understanding (MOUs) and Management Agency Agreements, activity coordination both at the upper management level (eg: Watershed Management Strategic Planning) and the staff level program collaboration (eg: Interagency Coordinating Committee). Your concern here pertains more to issues that are being answered in the Progress Report, and a review of this document when it is released should help to answer some of your questions regarding interagency coordination.

Reference to how the State intends to use the substantial funds available through Propositions 40 and 50 – There are a variety of changes that are being put into place with respect to distribution and management of grant and bond money funds, some of which are briefly listed below:

The California Environmental Protection Agencies (Cal/EPA) and the California Resources Agencies (Cal/RA) have been in the process of developing a Watershed Management Strategic Plan (WMSP), pursuant to recommendations in a Report to the Legislature, as required by Assembly Bill 2117. A key initiative in the WMSP is directed at the appropriate improvement and coordination of funding activities.

A recent MOU between these same agencies has been signed in order to improve integration and coordination of watershed policies, funding, and program implementation. Another product of the MOU is the California Watershed Council (CWC) which will serve in an advisory capacity to the WMSP Steering Committee. The first meeting of the CWC was held on August 28, and the interest among the attendees of improving bond-funded allocations was tremendous. This is becoming a critically valuable process and your input in the CWC is highly recommended. If you have any further questions about the WMSP of the CWC, please contact Ken Coulter, the SWRCB Watershed Management Coordinator, at P. O. Box 100, Sacramento, CA 95812-0100 or (916) 341-5496.

The utilization of the grant and bond funds include specific requirements for expenditures in the area of watershed management, where NPS issues predominate. There are literally millions of grant and bond fund dollars that are designated for use in this manner. The NPS Program facilitates the section by providing the framework for MM implementation from which project proponents can design their program. Additionally, there is a significant effort by the SWRCB Division of Financial Assistance to streamline and improve the consolidated RFP selection process for effective distribution of grant and bond fund monies so that the best, most cost-effective projects are selected.

Thank you again for your thoughtful suggestions and comments to the Draft Five-Year Plan. We hope that the clarifications in this letter, and changes made with the final Five-Year Plan will help address your concerns. We further encourage you to continue your communications with our NPS Program staff and to participate more fully in water quality protection through participation in the CWC and through other administrative and legislative avenues that will confirm the importance of an effective NPS Program in California.

If you have any questions, please do not hesitate to contact me at (916) 341-5487 or Margie Lopez Read of the NPS Program Plan Implementation Unit at (916) 341-5533

Sincerely;



Steve Fagundes, Chief  
NPS Program Plan Implementation Unit

cc: Ms. Alexis Strauss, Director  
Water Division, W-1  
United States Environmental Protection  
Agency, Region IX  
75 Hawthorne Street  
San Francisco, CA 94105

cc: Continued next page



02 30 2005

cc: Continuation page

Mr. Sam Ziegler  
Water Division, WTR-3  
United States Environmental Protection  
Agency, Region IX  
75 Hawthorne Street  
San Francisco, CA 94105

Mr. Al Wanger  
California Coastal Commission  
45 Fremont Street  
San Francisco, CA 94105

Mr. Arthur Baggett, Jr., Chair  
State Water Resources Control Board  
P. O. Box 100  
Sacramento, CA 95812-0100

Ms. Celeste Cantú, Executive Director  
State Water Resources Control Board  
P. O. Box 100  
Sacramento, CA 95812-0100



August 28, 2003

NATURAL RESOURCES DEFENSE COUNCIL

Margie Lopez Read  
State Water Resources Control Board  
Water Quality Division  
1001 I Sreet, 15th Floor  
Sacramento, CA 95814

Re: Comments on the "Draft California Nonpoint Source Program Five-Year Implementation Plan" (July 2003).

Dear Ms. Read:

On behalf of the Natural Resources Defense Council and its 110,000 California members, I am writing to register our strong objections to the Draft California Nonpoint Source Program Five-Year Implementation Plan. This plan is weak, nonspecific, and provides little indication that it will make a significant (or any material) impact on the nonpoint source pollution problem in California. In fact, the "plan" has virtually none of the characteristics usually associated with such a term. Instead the plan appears to be a simple listing of any and all existing programs or efforts that could be characterized as nonpoint source-related.

For these reasons, and those contained in the Ocean Conservancy's comments (which are hereby incorporated by reference), we urge the State Board to fundamentally revise the plan to include a quantitative and qualitative assessment of progress to date; specific implementation commitments; additional management measures; and additional regulatory features.

When the State embarked on this process in 1998, many in the environmental community objected to the approach as insufficient to make a measurable impact on one of the State's most important pollution problems. Now, five years later, it appears that our concerns have been validated. It is time for the SWRCB to make good on its stated commitment to reducing nonpoint source pollution. This proposed plan offers little indication that it will come close to doing so.

Sincerely,

David Beckman  
Senior Attorney



# State Water Resources Control Board



Gray Davis  
Governor

Winston H. Hickox  
Secretary for  
Environmental  
Protection

## Division of Water Quality

1001 I Street, Sacramento, California 95814 ♦ (916) 341-5487  
Mailing Address: P.O. Box 2231, Sacramento, California 95812  
FAX (916) 341-5808 ♦ Internet Address: <http://www.swrcb.ca.gov>

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption.  
For a list of simple ways you can reduce demand and cut your energy costs, see our website at [www.swrcb.ca.gov](http://www.swrcb.ca.gov).*

OCT 30 2008

Mr. David Beckman  
Senior Attorney  
Natural Resources Defense Council  
6310 San Vicente Boulevard, Suite 250  
Los Angeles, CA 90048

Dear Mr. Beckman:

### NATURAL RESOURCES DEFENSE COUNCIL COMMENTS ON THE "DRAFT CALIFORNIA NONPOINT SOURCE PROGRAM FIVE-YEAR IMPLEMENTATION PLAN"

Thank you for taking the time to review and provide comments to the Draft Nonpoint Source (NPS) Five-Year Implementation Plan (Draft Five-Year Plan). It is of great value that your organization follows the progress of California's efforts on the NPS Program, and it is through your communications and others like yours, that a statewide understanding of the importance of NPS Program implementation can occur. This valuable communication process is supported by our presentation of the draft document and notifications of its availability for public review.

Because your letter references the Ocean Conservancy's comments, a copy of our response to their comments is enclosed with this letter. It is hoped that a review of our response letter to the Ocean Conservancy will be sufficient to address your concerns.

Thank you again for your thoughtful suggestions and comments to the Draft Five-Year Plan. We further encourage you to continue your communications with our NPS Program staff and to participate more fully in water quality protection through involvement in the California Watershed Council and by confirming the importance of NPS pollution prevention through other administrative avenues.

If you have any questions, please do not hesitate to contact me at (916) 341-5487, or Margie Lopez Read of the NPS Program Plan Implementation Unit at (916) 341-5533.

Sincerely,

Steve Fagundes, Chief  
NPS Program Plan Program Implementation Unit

Enclosure (letter to Ocean Conservancy)

cc: See next page

*California Environmental Protection Agency*

Mr. David Beckman

- 2 -

OCT 30 2003

cc: Continuation page

Ms. Alexis Strauss, Director  
Water Division, W-1  
United States Environmental Protection  
Agency, Region IX  
75 Hawthorne Street  
San Francisco, CA 94105

Mr. Sam Ziegler  
Water Division, WTR-3  
United States Environmental Protection  
Agency, Region IX  
75 Hawthorne Street  
San Francisco, CA 94105

Mr. Al Wanger  
California Coastal Commission  
45 Fremont Street  
San Francisco, CA 94105

Mr. Arthur Baggett, Jr., Chair  
State Water Resources Control Board  
P. O. Box 100  
Sacramento, CA 95812-0100

Ms. Celeste Cantú, Executive Director  
State Water Resources Control Board  
P. O. Box 100  
Sacramento, CA 95812-0100



3220 Nebraska Avenue  
Santa Monica CA 90404

ph 310 453 0395  
fax 310 453 7927

info@healthebay.org  
www.healthebay.org

August 28, 2003

Margie Lopez Read  
State Water Resources Control Board  
Water Quality Division  
1001 I Street, 15th Floor  
Sacramento, CA 95814

**Re: Comments on the Draft California Nonpoint Source Program Five-Year Implementation Plan.**

Dear Ms. Read:

Thank you for the opportunity to comment on the Draft California Nonpoint Source Program Five-Year Implementation Plan (NPSIP). Heal the Bay has read and agrees with the comment letter from the Ocean Conservancy and we hereby incorporate their letter by reference.

Nonpoint source pollution and urban stormwater are the largest sources of pollution to California's receiving waters. Many of the state's impaired water bodies have degraded beneficial uses because of ongoing impacts of unregulated or poorly regulated non-point and stormwater sources. Among the problems caused by these sources are degraded salmonid habitats; eutrophication of creeks, lakes and lagoons; beaches that pose a substantial health risk to swimmers; and aquatic sediments, streams and lakes that pose toxicological threats to aquatic life. Heal the Bay firmly believes that the State has a legal responsibility to implement a comprehensive plan to control nonpoint source pollution that will result in the protection of California's aquatic ecosystems and the enhancement of the State's hundreds of impaired water bodies.

The voters of California have consistently supported water quality clean-up efforts with hundreds of millions of dollars in bond funds from numerous propositions, including Propositions 13, 40 and 50. The NPSIP provides no mechanism for accountability to these voters on the issue of nonpoint source pollution to our waterbodies. It is imperative that the NPSIP provide that accountability by clearly stating the specific, short- and long-term goals that will be achieved by implementing NPS pollution abatement funds, including timelines, milestones, and assessment measures for the funded clean up projects.

Heal the Bay is concerned that the NPSIP lacks the essential elements of an effective plan. For example, there are no clear objectives related to amelioration of nonpoint source pollution or improved water quality. There are no milestones provided to determine if the State is meeting objectives. There is no comprehensive assessment procedure to determine if, at the end of the five year period, the NPSIP has succeeded in controlling pollution from nonpoint sources to receiving waters in the state. These concerns are described in detail below.

### ***The NPSIP Lacks Clear Objectives and Milestones***

The 5-Year Plan Objectives (2003-2008) listed in the NPSIP focus on promoting implementation of Management Measures (MMs) and not on specific improvements to water quality. Only one of the four Objectives even refers to water quality, and then it states the goal of merely preserving water quality in waters that already meet water quality standards. There is no mention of improved water quality or amelioration of nonpoint source pollution in the 5-Year Plan Objectives. The following Objective should be added as number one in the list of Five-Year Plan Objectives: "Reduce nonpoint source pollution to impaired waterbodies in order to restore beneficial uses and to insure that water quality standards are met." As we have stated on numerous occasions previously, full implementation of the California NPS plan must result in the attainment of beneficial uses in all water bodies impaired by NPS pollution. Full implementation must also result in the attainment of water quality standards. Without such goals, the NPS plan will be seen as a failure by the public, and BMPs will not be designed to insure that water quality standards are met, and aquatic life and public health is protected, .

### ***Management Measures are Treated as Objectives***

Management measures are general goals, such as the urban pollution MMs 3.1A, "Runoff from Developing Areas – Watershed Protection" and 3.6, "Education/Outreach." Promoting watershed protection and education/outreach are good general goals but they will not in themselves lead to decreased NPS pollution to waterbodies. Furthermore they are not enforceable and they are difficult to evaluate objectively. To remedy this, there must be specific objectives within each MM that will contribute to the overall goal of the MM.

For example, within MM 3.1A, a specific objective that would lead to watershed protection in developing areas could be "Prevent channelization of natural waterbodies", and the activity that will accomplish this could be "Create legislation to make channelization of natural waterbodies for the purpose of new development illegal", with a timeline for when the bill will be introduced, etc. Another example of a specific objective for the same MM (3.1A) would be "Prevent nuisance flows to receiving waters" and an activity to implement this objective could be community outreach in the form of flyers, workshops and direct interaction with a minimum number of households in a specific watershed.

### ***Activities are not Related to Pollution Reduction Goals***

In Tables I through VIII the various activities that are supposed to implement the MMs are listed. There is no information that relates the specific activity to the MM that it supposedly implements, nor any information on how the activity will result in reduced nonpoint source pollution to a waterbody. Many of the TMDLs that are listed as activities do not even state what the TMDL will be for. The tables should have another column that explicitly states the pollutant that will be reduced and the goal of the reduction, e.g. for a sediment TMDL, the goal may be an 80% reduction in sediment inputs from nonpoint sources.



### ***Progress and Success Criteria are Difficult to Evaluate***

The use of two categories to describe the "Process Element" that each activity represents is confusing and does not allow any progress evaluation of that activity. "Pre-Implementation" covers the Process elements of "Assess", "Plan", "Coordinate" and "Target". By condensing all these elements into one category of "Pre-Implementation", the NPSIP removes our ability to determine progress for each activity and potential results (i.e. NPS pollution reduction) of each activity within the five year time frame. This is exacerbated by the lack of milestones or timelines for each activity, other than the final completion date (usually 2008).

The Process Element listed for each activity must be more specific, i.e. it should be one of the original six elements approved by the EPA in the original *Plan for California's Nonpoint Source Pollution Control Program (Program Plan)*.<sup>1</sup> Those six elements are (1) assess; (2) target; (3) plan; (4) coordinate; (5) implement; and (6) track and monitor.

The listed Success Criteria are also vague and difficult to evaluate. For example, "Exchange of information and technical assistance" is the success criterion for the activity "Facilitate meetings of Urban Pesticide Committee", and "Control of runoff" is the success criterion for an activity involving urban runoff from irrigation systems at Malibu Creek (the actual activity description is merely a description of how urban runoff affects Malibu Creek so we do not repeat it here). In some cases, the Activity Name, Activity Objective, Activity Description, and Success Criteria are all exactly the same, for example on p. 36 of Table I, there is an Activity called "Participate in watershed awareness activities". The Objective, Description and Success Criteria for this activity all say exactly the same thing. We have no way to know what the specific public awareness activities will be, what their goals are or how their success will be evaluated. In general, there is too little information in the project descriptions and in the Success Criteria to allow any evaluation of progress to be made in the activities during this five-year period, or of the eventual success of the activities when they are completed.

Many TMDL activities in Region 4 have a success criterion of "delisting from 303d list". This is an acceptable success criterion because it is measurable and because it indicates that a waterbody that was polluted by nonpoint source pollution has been cleaned up enough to be removed from the section 303(d) list.

### ***Tracking and Monitoring***

There are very few activities listed for the process element "Tracking and Monitoring." Further, there are no monitoring plans specified within activities, to determine BMP efficacy and improvements in receiving water quality and aquatic life and/or habitat. Monitoring of NPS sources and loads to waterbodies is important on a larger scale, to insure that NPS pollution does not continue to cause or contribute to exceedances of water quality standards. An enforcement program to insure compliance with NPS-related programs such as TMDLs is also necessary, in order to fully implement a comprehensive California NPS program.

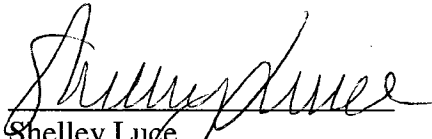
---

<sup>1</sup> EPA's review and approval (January 2000) of the Program Plan is available at <http://www.epa.gov/region09/water/nonpoint/cal/upgradereview.html>.

In our comments on the Draft California Nonpoint Source Strategy and Implementation Plan of 1999,<sup>2</sup> Heal the Bay urged the State to take a more comprehensive and prescriptive approach to developing and implementing the Nonpoint Source Strategy and Implementation Plan. We were disappointed that the State ignored many of our comments at that time, especially regarding the need for specific water quality goals and water quality performance standards. Four years later, we are still frustrated by the State's continued refusal to include specific goals for nonpoint source pollution reduction. We believe that the serious water quality problems caused by nonpoint source pollution will not be cleaned up if the State relies on the vague and unenforceable goals presented in this NPSIP.

Please feel free to call us if you would like to discuss our comments.

Sincerely,

  
Shelley Luce  
Staff Scientist

  
Mark Gold, D.Env.  
Executive Director

---

<sup>2</sup> Letter from Heal the Bay to Walter Pettit of the State Water Resources Control Board, July 23, 1999.





Winston H. Hickox  
Secretary for  
Environmental  
Protection

# State Water Resources Control Board

## Division of Water Quality

1001 I Street, Sacramento, California 95814 ♦ (916) 341-5487  
Mailing Address: P.O. Box 2231, Sacramento, California 95812  
FAX (916) 341-5808 ♦ Internet Address: <http://www.swrcb.ca.gov>



Gray Davis  
Governor

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at [www.swrcb.ca.gov](http://www.swrcb.ca.gov).*

OCT 30 2003

Ms. Shelley Luce, Staff Scientist  
3220 Nebraska Avenue  
Santa Monica, CA 90404

Mr. Mark Gold, Executive Director  
3220 Nebraska Avenue  
Santa Monica, CA 90404

Dear Ms. Luce and Mr. Gold:

### HEAL THE BAY COMMENTS ON THE DRAFT CALIFORNIA NONPOINT SOURCE PROGRAM FIVE-YEAR IMPLEMENTATION PLAN

Thank you both for taking the time to review and provide comments to the Draft Nonpoint Source (NPS) Five-Year Implementation Plan (Draft Five-Year Plan). We appreciate that your organization follows the progress of California's efforts on the NPS Program, and it is through communications like yours that a statewide understanding of the importance of NPS Program implementation can occur.

We believe that most of your concerns were answered by the response sent to the Ocean Conservancy's comments, which you reference in your letter. However, two comments are provided below to adequately respond to additional concerns expressed in your letter.

#### *The NPSIP Lacks Clear Objectives and Milestones*

In addition to the comments provided by Ocean Conservancy, your letter indicated that a rewording of one of our Five-Year Plan objectives was in order. Therefore, the third objective listed in Section 1 has been changed from:

“Promote the implementation of MMs and use of MPs for the NPS component of TMDLs or in 303(d) listed water bodies”

to the following:

“Promote water quality improvements and the return of beneficial uses through the implementation of MMs and use of MPs for the NPS component of TMDLs or in 303(d) listed waterbodies.”

It is hoped that the addition of this phrase will emphasize the importance of the connection to water quality and our NPS Management Measures (MMs) implementation goals.

**California Environmental Protection Agency**

OCT 30 2003

***Management Measures are Treated as Objectives***

We agree that the *Plan for California's Nonpoint Source Pollution Control Program* (NPS Program Plan) designated "management measures (MMs) as goals." In designating a MM as a goal, it was our intent to consider the entire MM. As such, we disagree with your statement that MMs "will not in themselves lead to decreased NPS pollution to water bodies." For example, a more extensive reading of MM 3.1A shows that the MM establishes general goals to:

1. Avoid conversion, to the extent practicable, of areas that are particularly susceptible to erosion and sediment loss;
2. Preserve areas that provide important water quality benefits and/or are necessary to maintain riparian and aquatic biota;
3. Protect to the extent practicable the natural integrity of water bodies and natural drainage systems associated with site development – including roads, highways, and bridges;
4. Limit increases of impervious surfaces; and
5. Provide education and outreach to address sources of NPS pollution.

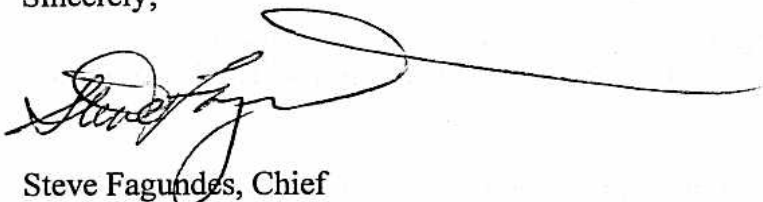
We feel that achieving these "general goals" will result in improved water quality.

As was emphasized in your letter, we agree that there must be specific objectives within each MM that will contribute to the overall goal of the MM. These specific objectives are contained within the "Activity Objective and Description" column for each "Activity Name." These activities and related objectives are then used to achieve the general goals provided by the MM.

Thank you both again for your thoughtful suggestions and comments to the Draft Five-Year Plan. We further encourage you to continue your communications with NPS Program staff and to participate more fully in water quality protection through involvement in the California Watershed Council and by confirming the importance of NPS pollution prevention through other administrative avenues.

If you have any questions, please do not hesitate to contact me at (916) 341-5487 or Margie Lopez-Read of the NPS Program Plan Implementation Unit at (916) 341-5533.

Sincerely;



Steve Fagundes, Chief  
NPS Program Plan Implementation Unit

cc: See next page

OCT 30 2003

cc: Continuation page

Mr. Alexis Strauss, Director  
Water Division, W-1  
United States Environmental Protection  
Agency, Region IX  
75 Hawthorne Street  
San Francisco, CA 94105

Mr. Al Wanger  
California Coastal Commission  
45 Fremont Street  
San Francisco, CA 94105

Mr. Arthur Baggett, Jr., Chair  
State Water Resources Control Board  
P. O. Box 100  
Sacramento, CA 95812-0100

Ms. Celeste Cantú, Executive Director  
State Water Resources Control Board  
P. O. Box 100  
Sacramento, CA 95812-0100



# City of Seal Beach



CITY HALL 211 EIGHTH STREET  
SEAL BEACH, CALIFORNIA 90740  
(562) 431-2527 • www.ci.seal-beach.ca.us

August 28, 2003

State Water Resources Control Board  
Attn: Margie Lopez Read, Water Quality Division  
10011 "I" Street, 15<sup>th</sup> Floor  
Sacramento, CA 95814

Dear Ms. Read:

**SUBJECT: "DRAFT CALIFORNIA NONPOINT SOURCE PROGRAM FIVE-YEAR IMPLEMENTATION PLAN" - CITY OF SEAL BEACH COMMENTS**

Our staff has reviewed the "Draft California Nonpoint Source Program Five-Year Implementation Plan" and is supportive of the overall program. It is an ambitious and comprehensive program, and our City will support the proposed program.

In reviewing this five-year implementation plan, the City has several concerns and issues that need to be reflected upon and considered by the State Board ("Board") as it continues to work with California cities and counties in planning, implementing, and enforcing clean water programs throughout the State.

**OVERARCHING ISSUES:**

The City of Seal Beach would set forth the following points as overarching issues and concerns for the Board to consider in its adoption of the "Draft California Nonpoint Source Program Five-Year Implementation Plan" and throughout the time frame for the implementation program established by its adoption:

- The State Water Resources Control Board, the California Environmental Protection Agency (Cal EPA), the California Coastal Commission, the California Department of Fish and Game, the League of California Cities Water Quality Regulatory Task Force, and other appropriate stakeholders, should establish a formal program of continuing dialogue during the term of this implementation program to meet and confer to discuss issues of concern, investigate positive solutions, and develop mechanisms to create partnerships between these parties and the local agencies that ultimately are the final enforcer's of the programs and

regulations that are adopted by the regional boards. Particular areas of initial focus of such an effort should be focused on:

- Future revisions to the Board's strategic plan to incorporate efficient groupings of TMDLs, Basin Plan amendments, water quality standard development, and beneficial use designations in order to achieve reasonable and cost effective permits and treatment plans.
- Investigate ways to utilize scarce financial resources in a way that will have the broadest and most significant beneficial water quality and environmental impacts.

### **SPECIFIC RECOMMENDATIONS:**

The City has several specific recommendations that are requested to be given serious and thoughtful consideration by the Board during its adoption process. Those specific areas of concern are set forth below:

- **Permits/Permit Scope** - Inconsistencies in permit language and regional board and staff interpretations of permit language currently exist.
  - **Recommended Actions:**
    - Establish two working sub-committees with the parties of interest discussed above to review waste water permits and storm water permits for format, definition, and reporting consistency problems and make recommendations on appropriate follow-up action.
    - The Board to work with the parties of interest discussed above to suggest guidance and templates for format and definitions to resolve problems.
    - Work to resolve issues of split jurisdiction of regional boards within a particular community. Having two different sets of standards and regulations that are applicable to the same community is a tremendous burden to place on that local community, and its residents.
- **Economic Impacts of Permits** - This concern relates to whether, and if so, how, state requirements exceed requirements of the federal Clean Water Act and whether the additional cost is warranted for the benefits.
  - **Recommended Actions:**
    - Evaluate whether state requirements exceed federal Clean Water Act requirements and if so, assess if the additional cost is warranted by the benefits.
    - Consider implementation of a program to require the Board, and its regional boards, to consider cost and availability of funding analysis for requirements, including reporting, for implementation of individual NPDES permits. Require an analysis of the implementation costs and the incremental costs and benefits to water quality.
    - Establish a sub-committee to work with the parties of interest discussed above to evaluate the economic impacts and alternatives of regional

issues, such as EDW, the Tributary Rule, long term storage, and seasonal discharge prohibitions.

- **Storm Water BMP Testing and Monitoring** – Permittees should be assured that if they test the effectiveness of Best Management Practices (BMPs) that the results of that sampling and analysis will not be used as evidence of a violation of receiving water limitations.
  - **Recommended Actions:**
    - Work with the parties of interest discussed above to encourage evaluation of new best management practices and new methodologies in a way that does not lead to violations of storm water permits.
    - Incorporate this type of protective language into storm water permits issued during the term of the current permits.
  
- **"Maximum Extent Practicable" Definition** – All parties could benefit from a standard definition of "maximum extent practicable". A starting point in this effort could be that proposed by SB 1342 (Morrow). Please refer to the discussion below regarding **Clearinghouse for Storm Water Best Management Practices** for further discussion on this issue.
  - **Recommended Actions:**
    - Work with the parties of interest discussed above to explore the feasibility of developing a standard definition of "maximum extent practicable".
    - Coordinate this effort with the other state agencies such as the Coastal Commission and the Department of Fish and Game to ensure that all resource agencies and enforcement agencies that local jurisdictions have to deal with in this area are involved in the process.
  
- **Partnering with the Enforcement Agency** – A good working relationship between the regional boards and its permittee's is critical to overall permit development, implementation, and enforcement. These efforts require a partnership approach, not an adversarial approach.
  - **Recommended Actions:**
    - Work with the parties of interest discussed above to develop programs and policies to work cooperatively to expedite updates of basin plans, including exploration of how to expedite the updating of beneficial uses and water quality objectives.
    - Explore with the parties of interest discussed above the feasibility of authorizing municipalities, COGs, regional planning agencies or JPAs to conduct the studies needed to establish beneficial uses and water quality objectives for their water bodies.
    - Coordinate this effort with the other state agencies such as the Coastal Commission and the Department of Fish and Game to ensure that all resource agencies and enforcement agencies that local jurisdictions have to deal with in this area are involved in the process.

- **Resource Agency and Cal-EPA Interdepartmental Protocols** –There needs to be a common understanding of requirements for water quality improvement projects by the departments within the Resources Agency and Cal-EPA, including the regional boards, the Coastal Commission and the Department of Fish and Game.
  - **Recommended Actions:**
    - Work with the parties of interest discussed above to establish a process to regularly meet and confer (along with dischargers) in order to minimize conflicting permit requirements, duplication, and inconsistencies, and jurisdictional roles and responsibilities.
    - Consider implementation of a “lead agency” program to expedite NPDES permit processing, similar to what is available for certain types of construction, development, and hazardous waste clean up projects.
  
- **Water Quality Testing** – Surface and ocean water quality testing programs are under funded. More funding is needed to get more timely, accurate and appropriate test results that could help shorten beach closure periods. This issue is particularly relevant to our community, as Seal Beach receives all of the storm water flows from the San Gabriel River drainage area, one of the largest urban watersheds in southern California.
  - **Recommended Actions:**
    - Work with the governor, legislature, and appropriate public interest groups to support and secure additional funding and protocols to get faster, more appropriate and accurate surface and ocean water quality testing.
    - Establish a working subcommittee to investigate appropriate changes in science and technology that allow for reevaluation of the processes, protocols, and standards for the testing and evaluation of surface and ocean waters, and the protocols for posting, closure, and reopening of beaches.
  
- **Clearinghouse for Storm Water Best Management Practices** –There needs to be a state clearinghouse of Best Management Practices (BMPs). Such a clearinghouse would allow for consistent statewide consideration of effective BMPs, which is extremely difficult for local jurisdictions to research and understand in developing its program of the development and imposition of BMPs during project review and approval.

This issue is of particular concern given the responses of the Region 9 Board regarding the Orange County Drainage Area Management Plan (DAMP), Chapter 7 and Model Water Quality Management Plan, dated May 21, 2003. The comment from the Regional Board is disturbing and is quoted below:

*“Sole reliance on the BMPs presented in the set of handbooks produced by CASA (California Association of Stormwater Agencies) will not meet the ‘Maximum Extent Practicable’ (MEP) benchmark*



*established by this Permit. First, the MEP criteria is the benchmark for municipal permittee's activities. The benchmark for private construction and industrial activities is best available technology, economically achievable (BAT) and best conventional pollutant control technology (BCT). As to BMP reference materials, other relevant data, documentation and BMPs must be considered. Finally the BMP handbooks produced by CASA have not been fully reviewed or approved by the State or Regional Boards and should be considered as a single element in a library of BMP design criteria, procedures, parameters and inspection/maintenance requirements." (Emphasis in original)*

The breadth and scope of such a response is overwhelming to local jurisdictions. How are local enforcement agencies expected to develop and maintain a "library of BMP design criteria, procedures, parameters and inspection/maintenance requirements" that has been "been fully reviewed" and "approved by the State or Regional Boards"? This should be a board responsibility, not the individual responsibility of each governmental entity in the State of California. This issue also touches on the MEP discussion point above.

- **Recommended Actions:**
  - That the State Board consider the establishment of a clearinghouse for BMPs in cooperation with the appropriate agencies and organizations.
    - Such effort should encourage the involvement of the State and regional boards in analyzing BMPs and their effectiveness under different circumstances. This information should be made available through a web-based, searchable clearinghouse to allow easy access by all local enforcement agencies.
    - The Board should work jointly with cities, counties, and special districts to establish testing protocols for BMPs which could ultimately be incorporated into manuals available on-line through the clearinghouse. The Board should develop this program in a cooperative effort with CASA and CASQA.
- **Coordination Among Partners** – The Board should take the lead in developing coordination efforts with existing organizations such as CASA and CASQA that have expertise in technical, legal, and regulatory issues involving waste water and storm water issues. Efforts to involve the League of California Cities Water Quality Regulatory Task Force, the Bay Area Clean Water Agency, the Southern California Alliance of POTWs and the Central Valley Clean Water Association should be a priority.
  - **Recommended Actions:**
    - Establish a process of consultation and involvement with the parties of interest discussed above to better coordinate regulatory and legal activity

and information sharing during the rule development and implementation process.

- As a state agency, support the efforts of other interested parties in supporting legislative efforts to provide adequate funding for storm water and waste water programs.
- Compile and distribute through the clearinghouse for BMPs information on funding opportunities and options that are available from different sources for cities, counties, and waste water agencies.
- Support legislation that would authorize the Air Resources Board and air districts to regulate air pollution sources if the air pollution ultimately impacts water quality.
- Support legislation that promotes the use of environmentally friendly products and practices.

**COMMENTS ON THE "DRAFT CALIFORNIA NONPOINT SOURCE PROGRAM FIVE-YEAR IMPLEMENTATION PLAN":**

The City of Seal Beach supports the 2003-2008 Implementation Plan Objectives, as set forth within the document. In reviewing the detail provided of the specific programs proposed for implementation during the 2003-2008 time frame, the City is impressed with the breadth of the programs proposed; it is a most ambitious program given the current fiscal concerns facing not only the state, but each county, city, and special district organization that will have the responsibility to develop and implement programs during this time frame. The scope of this program reinforces our earlier comments on developing "partnerships" to allow for the effective utilization of scarce public resources for these important activities.

There are many programs presented within the document, and our community would like to call particular attention and encourage the continuing support of the State Board in the implementation of the following programs. The noted programs will have direct impacts on the ability of our staff to effectively cope with the increasing permit requirements, monitoring activities and enforcement actions that may be necessary. These programs will also have beneficial impacts upon the water quality that our citizens and visitors to our beach areas will either endure or enjoy during the time period of this implementation plan.

**Programs of Particular Interest and Supported  
by the City of Seal Beach:**

Pre-Implementation 2.723

Monitoring Needs Assessment

Pre-Implementation 22.003

Coastal Development Permit and Local  
Coastal Program Review

Implement 6.079	Long Beach MS4 NPDES Permit Renewal
Implement 22.006	Internal Staff Training
Implement 22.018	Web-based NPS Information
Track/Monitor 6.019	Water Quality Assessment, Source ID & Management Action Evaluation, San Gabriel River
Pre-Implementation 22.007-1	MURP and NEMO
Implement 22.009-3	Pollution Prevention/Education
Pre-Implementation 22.007-2	MURP and NEMO
Pre-Implementation 22.007-3	MURP and NEMO
Implement 6.050	TMDL Implementation for San Gabriel River - Nutrients
Implement 19.003-2	Resource-Efficient Landscaping
Pre-Implementation 6.008	Watershed Management Plan for San Gabriel River above Whittier
Pre-Implementation 22.001	Local Government Outreach
Pre-Implementation 22.012	Beach Water Quality Task Force (BWQTF)
Implement 6.032	San Gabriel Watershed NPS Pollution Reduction Program
Track/Monitor 6.020	Assessing and Reducing Sources of Plastics/Trash in Urban/Coastal Areas
Pre-Implementation 2.301	Establish Regional Standards for Sewage Disposal
Implement 2.305.1	Require Installation of Additional Sewage Disposal Facilities
Implement 2.400	Develop Technical Assistance Manual and CEQA Appendix
Pre-Implementation 15.004	Coordinate Wetlands-Related Projects in Southern California
Pre-Implementation 15.007	Include Wetlands in Basin Plan

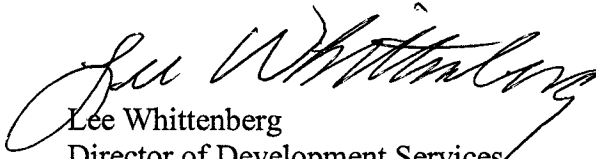
Implement 2.508	Develop CEQA Guidelines
Pre-Implementation 15.005	Coordinate/assist SCCWRP Coastal Activities
Implement 16.001	Caulerpa Taxifolia Eradication and Prevention

It is our sincere hope that these programs will provide significant and noticeable improvements to water quality within the San Gabriel River watershed, and particularly the lower reaches of the San Gabriel River and the receiving ocean waters of the Pacific Ocean. Our citizens, the citizens of Orange and Los Angeles Counties, and the millions of visitors to the beaches of the Long Beach, Seal Beach, and the more southerly beaches in Orange County deserve and will embrace these important water quality improvements.

Please feel free to contact our City Manager, John Bahorski, who is also a member of the League of California Cities Water Quality Regulatory Task Force regarding any of our comments. Mr. Bahorski can be reached at (562) 431-2527, extension 300, or by e-mail at [jbahorski@ci.seal-beach.ca.us](mailto:jbahorski@ci.seal-beach.ca.us).

If you have particular questions of myself, I can be reached at (562) 431-2527, extension 313, or by e-mail at [lwhittenberg@ci.seal-beach.ca.us](mailto:lwhittenberg@ci.seal-beach.ca.us).

Sincerely,

  
Lee Whittenberg  
Director of Development Services  
City of Seal Beach

Distribution:           City Council  
                              Environmental Quality Control Board  
                              City Manager  
                              City Engineer/Director of Public Works

League of California Cities – Water Quality Regulatory Task Force



**Winston H. Hickox**  
Secretary for  
Environmental  
Protection

# State Water Resources Control Board

## Division of Water Quality

1001 I Street, Sacramento, California 95814 ♦ (916) 341-5487  
Mailing Address: P.O. Box 2231, Sacramento, California 95812  
FAX (916) 341-5808 ♦ Internet Address: <http://www.swrcb.ca.gov>



**Gray Davis**  
Governor

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption.  
For a list of simple ways you can reduce demand and cut your energy costs, see our website at [www.swrcb.ca.gov](http://www.swrcb.ca.gov).*

OCT 30 2003

Mr. Lee Whittenberg, Director  
Development Services  
City of Seal Beach  
211 Eighth Street  
Seal Beach, CA 90740

Dear Mr. Whittenberg:

### CITY OF SEAL BEACH COMMENTS ON THE "DRAFT NONPOINT SOURCE PROGRAM FIVE-YEAR IMPLEMENTATION PLAN"

Thank you for taking the time to review and provide comments on the Draft Nonpoint Source (NPS) Five-Year Implementation Plan (Draft Five-Year Plan). It is through your communications and others like yours, that a statewide understanding of the importance of NPS Program implementation can occur. With this response, we would like to address the concerns expressed in your letter and hope this will further enhance your understanding of the program limitations and capabilities, as well as encourage your continued support.

Your August 28, 2003 letter (enclosed) expresses many concerns that are directly linked to point source issues, such as stormwater National Pollutant Discharge Elimination System (NPDES) permits and permit correspondence from the Santa Ana Regional Water Quality Control Board (Santa Ana RWQCB). Although the NPS urban category activities are related to the Phase I and II Stormwater Programs, the NPDES point source programs are conducted under a regulatory authority that is separate from the NPS Program. For this reason, your specific permit concerns need to be addressed through the Stormwater Programs at the State Water Resources Control Board (SWRCB) and Santa Ana RWQCB. In an effort to promote this communication, this letter is being forwarded to Mr. Mike Adackapara of the Santa Ana RWQCB and Mr. Bruce Fujimoto of the SWRCB.

The similarities, links, and common goals between the point source, stormwater permit programs, and the urban category activities of the NPS program however do exist. We appreciate your acknowledgement that these NPS activities have the potential to provide positive impacts to water quality in your area and will continue to promote their development as long as funding and other State resources allow.

One of the overarching issues that you discuss relates to interagency coordination of programs, which is a critical part of the effort for California's NPS Program implementation. Through the Interagency Coordinating Committee (IACC), most of the agencies that you listed were involved

*California Environmental Protection Agency*

with NPS implementation through the Five-Year Plan and are conducting ongoing efforts to improve collaboration. These are important efforts, especially considering the ever-shrinking fiscal resources impacting all State agencies. It is also important to recognize that the SWRCB does not have any authority to require participation in the IACC, and it is to the credit of the 28 participatory agencies that many positive efforts continue to take place.

There is another statewide effort being conducted in California known as the Watershed Management Strategic Plan, which resulted in a recent memorandum of understanding (MOU) between the California Resources Agency and the California Environmental Protection Agency. The intent of the MOU is to develop coordinated implementation of the agencies' watershed programs (including NPS and Stormwater) as a crucial effort to addressing critical problems and the efficient and effective use of public funds. The MOU also specifies a process for stakeholder participation, which hinges on the California Watershed Council (CWC). If you wish to participate in the CWC, please contact Ken Coulter, SWRCB's Watershed Management Coordinator, at P.O. Box 100, Sacramento, CA 95812-0100 or [coulk@swrcb.ca.gov](mailto:coulk@swrcb.ca.gov). His telephone number is (916) 341-5496.

Thank you once again for your thoughtful suggestions and comments in the Draft Five-Year Plan. We hope that the clarifications in this letter, and changes made on the final Five-Year Plan will help address your concerns. We further encourage you to continue your communications with our NPS Program staff and to participate more fully in water quality protection through participation in the CWC and by expressing the importance of NPS pollution prevention through other administrative and legislative avenues.

If you have any further questions regarding the NPS Program Five-Year Plan, please do not hesitate to contact me at (916) 341-5487, or Margie Lopez Read of the NPS Program Plan Implementation Unit at (916) 341-5533.

Sincerely,



Steve Fagundes, Chief  
NPS Program Plan Implementation Unit

Enclosure

cc: See next page

cc: Continuation page

Mr. Sam Ziegler  
United States Environmental Protection  
Agency, Region IX, WTR-3  
75 Hawthorne Street  
San Francisco, CA 94105

Mr. Al Wanger  
California Coastal Commission  
45 Fremont Street  
San Francisco, CA 94105

Mr. John Bahorski  
Seal Beach City Manager  
City Hall  
211 Eight Street  
Seal Beach, CA 90740

Mr. Mike Adackapara  
California Regional Water Quality  
Control Board, Santa Ana Region  
3737 Main Street, Suite 500  
Riverside, CA 92501-3339

Mr. Bruce Fujimoto, Chief  
Stormwater Section  
Division of Water Quality  
P. O. Box 100  
Sacramento, CA 95812-0100







# CALIFORNIA FARM BUREAU FEDERATION

NATURAL RESOURCES AND ENVIRONMENTAL DIVISION

2300 RIVER PLAZA DRIVE, SACRAMENTO, CA 95833-3293 · PHONE (916) 561-5665 · FAX (916) 561-5691

September 2, 2003

Margie Lopez Read  
State Water Resources Control Board  
Water Quality Division  
1001 I Street, 15<sup>th</sup> Floor  
Sacramento, CA 95814

**RE: Draft California Nonpoint Source Program Five-Year Implementation Plan,  
July 2003 through June 2008**

The California Farm Bureau Federation ("Farm Bureau") appreciates this opportunity to provide comments and suggestions pertaining to the *Draft California Nonpoint Source Program Five-Year Implementation Plan, July 2003 through June 2008* ("Draft Plan"). The Farm Bureau represents 53 county Farm Bureaus, and through them, more than 90,000 members. It is a non-profit, voluntary membership corporation whose purpose is to work for the protection of agriculture and the rural environment in the State of California, and to find solutions to the problems of the farm, the farm home, and the rural community of the state.

Farm Bureau supports the general purpose of California's Nonpoint Source Pollution Control Program to restore and protect waters through the implementation of management measures for potential nonpoint sources of pollution. Establishing and following through with a viable long-term implementation plan for agricultural water quality that addresses real water quality problems with practical, feasible, and cost-effective solutions is critical to sustain the ability of California agriculture to continue feeding the state and exporting reliable and affordable food supplies to the nation and the world. To this end, Farm Bureau believes there are a few aspects of the Draft Plan that should be addressed in further detail.

## DRAFT PLAN OBJECTIVES AND GOALS

Section D, "Objectives and Activity Summary," sets forth nine objectives for the agricultural category of the Draft Plan. This list should be amended to reflect primary needs for coordination prior to the further implementation of the Nonpoint Source Pollution Control Plan. Farm Bureau believes that despite a multitude of Memoranda of Understanding, Management Agency Agreements, and other coordination agreements there continues to be a general disconnect resulting in inefficient implementation

decisions. In addition, the list should be amended to reflect existing coordination agreements and set forth the key provisions.

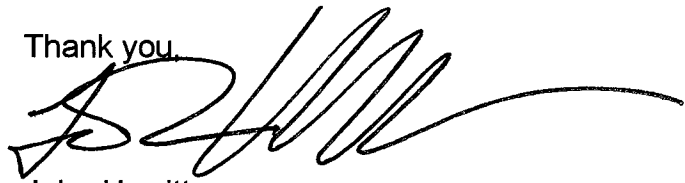
For example, subset "a)" is the only objective to identify and articulate any inter and intra-agency coordination. Other objectives that should be added include, but are not limited to: coordinating with the Department of Food and Agriculture to better understand the existing agriculture economic climate (commodity prices, input costs, impacts from disease, and other variables to the production process) as well as economic impacts associated with management practice implementation; coordinating with the Department of Pesticide Regulation to further understand the registration process and enforcement authority; coordinating with the Department of Conservation to further understand the potential impacts to the loss of agricultural lands; and coordinating with the University of California Cooperative Extension, Resource Conservation Districts, and the Natural Resource Conservation Service to gain further knowledge of management practice development and effectiveness.

#### RELATION TO OTHER STATE PROGRAMS

Section II B, Relation to Other State Programs, should be revised to better define the relationship of the Nonpoint Source Pollution Control Plan to other state programs. As written, this section currently provides a mere narrative summary of three programs that are within the State Water Resources Control Board's authority. The summaries lack specific details to show how these programs relate and there is no mention of other state water quality programs. It would be extremely beneficial to know how the Draft Plan affects or will interact with current state programs. For example, several state programs, including the Coastal Conservancy and the Wildlife Conservation Board, propose massive amounts of land acquisition as a mechanism for protecting and enhancing water quality. Management Measures as described by the Draft Plan may provide a lower cost alternative to outright land acquisition. It is unclear if this alternative is ever contemplated or even if the Management Measures are implemented after acquisition. It is this type of interrelationship with other State programs that should be explored and discussed in detail.

Thank you for the consideration of these comments on the Draft Plan. If you would like to discuss any aspects of these comments in further detail please feel free to contact me at either (916) 561-5614, or [jhewitt@cfbf.com](mailto:jhewitt@cfbf.com).

Thank you



John Hewitt  
Watershed Specialist



# State Water Resources Control Board

## Division of Water Quality

1001 I Street, Sacramento, California 95814 ♦ (916) 341-5487  
Mailing Address: P.O. Box 2231, Sacramento, California 95812  
FAX (916) 341-5808 ♦ Internet Address: <http://www.swrcb.ca.gov>

Winston H. Hickox  
Secretary for  
Environmental  
Protection



Gray Davis  
Governor

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at [www.swrcb.ca.gov](http://www.swrcb.ca.gov).*

Mr. John Hewitt, Watershed Specialist  
California Farm Bureau Federation  
Natural Resources and Environmental Division  
2300 River Plaza Drive  
Sacramento, CA 95833-3293

Dear Mr. Hewitt:

### CALIFORNIA FARM BUREAU FEDERATION COMMENTS ON THE DRAFT CALIFORNIA NONPOINT SOURCE FIVE-YEAR IMPLEMENTATION PLAN, JULY 2003 THROUGH JUNE 2008

Thank you for taking the time to review and provide comment to the Draft Nonpoint Source (NPS) Five-Year Implementation Plan (Draft Five-Year Plan). It is through your communications and others like yours, that a statewide understanding of the importance of NPS Program implementation can occur. With this response, we would like to take some time to address the concerns expressed in your letter and hope this will further enhance your understanding of the limitations and capabilities, as well as encourage your continued support.

Your letter expressed concerns related to specific interagency coordination not being one of the Draft Five-Year Plan's objectives. We agree that interagency coordination is critical to the success of the NPS program. As such, one of the objectives for the agriculture category is "Continue to improve upon existing interagency coordination in order to more effectively manage agricultural pollution". The specific "agency-related coordinating objectives" listed in your letter would be more appropriate to list as "specific activity objectives" that support the agriculture category objective relating to enhanced interagency coordination. In response to your comment, descriptions for the agricultural category objectives have been added to the final Five-Year Plan in order to clarify their meaning and provide examples of the specific types of interagency coordination that are included in this description.

Another part of the Draft Five-Year Plan you recommended to be considered for revision was the "Relationship to Other State Programs" section. The intention of this discussion was to clarify the integration of related programs under the State Water Resources Control Board's (SWRCB's) authority. This section was included in the report to address the SWRCB's various water quality programs. There have been some changes over the last five years in terms of how certain NPS discharges were managed and it was appropriate to describe these changes in order

*California Environmental Protection Agency*

OCT 30 2001

to provide a greater understanding of how they affect the NPS Program. A description has been added in the Five-Year Plan to clarify the intent of this section (Relation to Other SWRCB Programs).

As for other programs across the State that are related to NPS, these are discussed within the body of the Five-Year Plan. Each agency and Regional Water Quality Control Board (RWQCB) describes their NPS activities planned for the next five years, including any related programs that agency is involved with. Although members of the Interagency Coordinating Committee (IACC), the body that coordinated development of the Five-Year Plan, the Coastal Conservancy and the Wildlife Conservation Board did not participate in the this effort. However, one of the major objectives of the Five-Year Plan is to promote the implementation of MMs and related practices by all levels of water quality managers (federal, State, watershed groups and other stakeholders)." We anticipate continued potential for water quality improvement and expanded stakeholder involvement in the IACC.

Thank you once again for your thoughtful suggestions and comments to the Draft Five-Year Plan. We hope that the clarifications in this letter, and changes made to the final Five-Year Plan will help address your concerns. We further encourage you to continue your communications with our NPS Program staff and to participate more fully in water quality protection through participation in the California Watershed Council and through other administrative venues that will confirm the importance of an effective NPS Program in California.

If you have any further questions regarding the NPS Program Five-Year Plan, please do not hesitate to call me at (916) 341-5487 or Jessie Maxfield of the NPS Program Plan Implementation Unit at (916) 341-5484.

Sincerely;



Steve Fagundes, Chief  
Nonpoint Source Program Plan Implementtion Unit

Enclosure

cc: See next page

Mr. John Hewitt

- 3 -

cc: Continuation page

Mr. Sam Ziegler  
Water Division, WTR-3  
United States Environmental Protection  
Agency, Region IX  
75 Hawthorne Street  
San Francisco, CA 94105

Mr. Al Wanger  
California Coastal Commission  
45 Fremont Street  
San Francisco, CA 94105

Mr. Mark Beyeler  
State Coastal Commission  
1330 Broadway  
Oakland, CA 94612-2530

Ms. Bonnie Turner  
Wildlife Conservation Board  
1809 13<sup>th</sup> Street, Suite 103  
Sacramento, CA 95814





JAMES A. NOYES, Director

# COUNTY OF LOS ANGELES

## DEPARTMENT OF PUBLIC WORKS

*"To Enrich Lives Through Effective and Caring Service"*

900 SOUTH FREMONT AVENUE  
ALHAMBRA, CALIFORNIA 91803-1331  
Telephone: (626) 458-5100  
www.ladpw.org

ADDRESS ALL CORRESPONDENCE TO:  
P.O. BOX 1460  
ALHAMBRA, CALIFORNIA 91802-1460

August 28, 2003

IN REPLY PLEASE  
REFER TO FILE: WM-9

Ms. Margie Lopez Read  
State Water Resources Control Board  
Water Quality Division  
1001 I Street, 15th Floor  
Sacramento, CA 95814

Dear Ms. Read:

### **CALIFORNIA NONPOINT SOURCE PROGRAM FIVE-YEAR IMPLEMENTATION PLAN**

Enclosed are our comments on the California Nonpoint Source Five-Year Implementation Plan.

If you have any additional questions, please contact Ms. Jessica Murphy at (626) 458-4323, Monday through Thursday, 7:30 a.m. to 6 p.m.

Very truly yours,

JAMES A. NOYES  
Director of Public Works

FOR ROD H. KUBOMOTO  
Assistant Deputy Director  
Watershed Management Division

ER:sw  
C:\NPDES\RALSTONE\6.

Enc.

Document	Page	Activity Name	Discrepancy	Incorrect	Correct
Section IV	5	TMDL Implementation for Malibu Creek Nutrients	Date	06/30/2008	Date not yet established
Section IV	15	TMDL Implementation for LA River Pathogens	Date	10/01/2014	Not yet released
Section IV	15	TMDL Implementation for Malibu Creek Nutrients	Date	06/30/2008	Date not yet established
Section IV	17	TMDL Implementation for San Gabriel River Nutrients	Date	06/30/2008	Not yet released
Section IV	18	TMDL Implementation for Dominguez Channel Coliform	Date	06/30/2008	Not yet released
Section IV	19	TMDL Implementation for Ballona Creek Pathogens	Date	09/01/2014	Not yet released
Section IV	20	TMDL Implementation for LA River Metals	Date	10/01/2014	Not yet released
Section IV	35	LA River Street End Biofiltration	Location	LA County	North East Trees
Section IV	38	Watershed Management Plan San Gabriel above Whittier	Date	01/30/2004	12/30/2004
Section IV	39	Watershed Management Plan for Dominguez Channel	Date	01/30/2004	07/30/2004
Section IV	39	Watershed Management Plan for Rio Hondo River	Date	01/30/2004	02/28/2004
Section IV	40	Watershed Management Plan for Compton Creek	Location	LA County	Watershed Council
Section IV	40	Watershed Management Plan for Compton Creek	Date	02/28/2004	07/30/2004
Section IV	42	Malibu Creek Watershed Urban Runoff Reduction	Location	LA County	LVMWD



Section IV	42	San Gabriel Watershed NPS Pollution Reduction	Location	LA County	National Forest
Section IV	43	Three Springs Water Quality Improvements	Location	LA County	Village of Westlake
Section IV	44	Project Connect Restoring the Creek Community	Location	LA County	?
Section IV	45	Montana Basin Dry-Wet Weather Runoff BMP	Location	LA County	City of Santa Monica?
Section IV	46	Malibu Creek Watershed Wide Monitoring	Location	LA County	City of Calabasas
Section IV	47	Implementation of Coliform TMDL for Santa Monica Bay	Date	01/30/2004	7/15/06 (Dry Weather)
Section V	4	TMDL Implementation for Marina del Rey-Pathogens	Date	08/08/2013	Wet weather 10 or 18 years
Section V	4	TMDL Implementation for Marina del Rey-Toxics	Date	12/04/2013	Not yet released
Section V	19	TMDL Implementation for LA Harbor Beaches	Date	06/30/2008	Not yet released
Section VIII	2	TMDL Implementation for Malibu Pathogens	Date	11/06/2013	Date not yet established
Section VIII	11	City of LA Augustus B. Hawkins Wetlands Habitat	Location	LA County	City of LA?



# State Water Resources Control Board



Gray Davis  
Governor

Winston H. Hickox  
Secretary for  
Environmental  
Protection

Division of Water Quality  
1001 I Street, Sacramento, California 95814 ♦ (916) 341-5487  
Mailing Address: P.O. Box 2231, Sacramento, California 95812  
FAX (916) 341-5808 ♦ Internet Address: <http://www.swrcb.ca.gov>

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at [www.swrcb.ca.gov](http://www.swrcb.ca.gov).*

OCT 30 2003

Mr. Rod H. Kubomoto  
Assistant Deputy Director  
Department of Public Works  
County of Los Angeles  
900 South Fremont Avenue  
Alhambra, CA 91803-1331

Dear Mr. Kubomoto:

## RESPONSE TO COMMENTS ON THE DRAFT NONPOINT SOURCE (NPS) PROGRAM FIVE-YEAR IMPLEMENTATION PLAN

Thank you for your August 28, 2003 letter transmitting comments on our Draft NPS Five-Year Implementation Plan (Draft Five-Year Plan). The suggested corrections were forwarded to Regional Water Quality Control Board in Los Angeles, and appropriate changes will be made to the Draft Five-Year Plan.

Thank you once again for taking the time to review and comment. It is through these communications and others like them, that a statewide understanding of the importance of NPS Program implementation can occur. If you have any further questions, please do not hesitate to contact me at (916) 341-5487 or Margie Lopez Read of the NPS Program Plan Implementation Unit at (916) 341-5533.

Sincerely;

Steve Fagundes, Chief  
NPS Program Plan Implementation Unit

cc: Mr. Al Wanger  
California Coastal Commission  
45 Fremont Street  
San Francisco, CA 94105

Mr. Raymond Jay  
California Regional Water Quality Control Board,  
Los Angeles Region  
320 West 4<sup>th</sup> Street, Suite 200  
Los Angeles, CA 90013

*California Environmental Protection Agency*





# County of San Diego

## DEPARTMENT OF PUBLIC WORKS

JOHN L. SNYDER  
DIRECTOR

5555 OVERLAND AVE, SAN DIEGO, CALIFORNIA 92123-1295

(858) 694-2233 FAX: (858) 268-0461  
Web Site: [sdcdpw.org](http://sdcdpw.org)

August 29, 2003

Margie Lopez Read  
Water Quality Division  
State Water Resources Control Board  
1001 I Street, 15th Floor, Sacramento, CA 95814

Dear Ms. Read:

Thank you for the opportunity to comment on the draft Plan for California's Nonpoint Source Pollution (NPS) Control Program. As a permitted municipal stormwater discharger, County of San Diego is well aware of the importance of effectively coordinating California's overall NPS management efforts. In many instances, local governments have neither the resources nor authority to effectively manage or regulate key sources of pollution impacting our receiving waters. We must therefore rely on a number of state agencies to help fill in those gaps. We appreciate the thoroughness of this draft plan in articulating the priorities that will be pursued by those agencies. This will aid us considerably in planning our program activities since it enables us to better prioritize our efforts within a broader statewide NPS management context.

The County of San Diego, like many municipal governments, relies heavily on state funding to achieve many NPS management objectives beyond those explicitly mandated under our Municipal NPDES Stormwater Permit. We are currently developing several watershed management plans using Proposition 13 grant funding, and have been invited to submit full Requests for Proposal for five additional projects under the 2003 Consolidated Watershed Protection and Nonpoint Source Pollution Control Grants Program. We believe the County's recent success in obtaining grant funding reflects a fundamental compatibility of the visions of our respective agencies, and hope that this remains true in the future.

As an NPDES-permitted municipal stormwater discharger, the County is particularly interested in the Urban Category, which has important implications for our own NPS management efforts. While we appreciate that many of the projects on the Activity Summaries for the Urban Land Use Category are slated for statewide implementation,

Ms. Read  
August 29, 2003  
Page 2

we were disappointed to see only one (Chollas Creek pesticide monitoring) is planned for the San Diego region. We therefore request efforts be made to focus additional resources in the San Diego region. Section B.2 of the Introduction and Overview states that the "Five-Year Plan Objectives will be continually reviewed and refined ... in order to continue to align the Objectives more closely with actual water quality measures and improvements ...". We commend the flexibility inherent in this approach, and hope it also extends to the prioritization of new activities and projects prior to the finalization of this plan and over the remainder of the 2003–2008 cycle. I have attached examples of projects that could be funded in San Diego County.

Thank you again for the opportunity to comment on this draft plan. The County looks forward to continued coordination on NPS management efforts in the future. We would be happy to discuss potential projects that might be undertaken in the San Diego region over the next several years.

Sincerely,

Chandra L. Wallar, Assistant Director  
Department of Public Works

# County of San Diego Watershed Protection Program

## Potential Projects for FY 03-04

9/4/2003

### Science and Monitoring

1. Real-time Stormwater Monitoring and Now-casting and Fore-casting Capabilities for Watersheds (\$ 500,000 - \$ 2,500,000) - Develop two key functions needed to improve watershed and coastal water quality in San Diego County and provide the quick-response information necessary for early-warning of human health and environmental risks: (1) real-time precipitation, flow and water quality monitoring network based on wireless internet technology supporting the identification of source and impacts, and (2) data acquisition, dissemination, and modeling system to provide this information to the organizations and individuals with the responsibility for managing and responding to water quality impairments and risks. These functions provide immediate, short-term benefits to water quality managers and support a longer-term strategy of integrated watershed management in determining where stormwater is coming from and where it is going, as well as when and how much. These same technology resources can be used to augment flood warning and management systems.

Ongoing needs: Ongoing maintenance of monitoring equipment and data transmission infrastructure would be needed (costs undetermined). Additional costs would also be associated with expanding monitoring capabilities and extending coverage to the other 2/3 of the County's watersheds. This would be a multi-year process.

2. Web Cam with Internet Access for Sampling Sites (\$ 30,000 - \$ 50,000). The placement of water quality monitoring equipment adjacent to ALERT rain sensors could be beneficial to the County. The addition of cameras accessible through the Internet will provide visual confirmation of site conditions. Water surface elevations obtainable via surface gauge and camera and rain data collected through the ALERT sensors can provide additional valuable information to the assessment of water quality. This cost includes cameras (\$6,000) plus internet and cell phone access (\$3,000 per site).

Ongoing needs: Ongoing maintenance of monitoring equipment would be needed (costs undetermined). Additional costs would also be associated with extending coverage to other sites.

3. Watershed Modeling (\$ 100,000 - \$ 250,000) - Develop improved GIS-based modeling capabilities to support watershed management. Examples of potential applications include analyzing the transport and fate of contaminants, predicting the effects of hypothetical land development scenarios, establishing geo-spatially derived program funding formulas, and predicting sewage spill impacts to local beaches. This work would build on the results of work previously conducted by the San Diego Supercomputer Center under contract to the County during 1999 and 2000.

Ongoing needs: Completion of this project implies the ongoing use of modeling tools and continued collection of data necessary to run it. Additional costs might be associated with continued improvement of the model in future years. Costs cannot be estimated prior to the completion of the project.

4. Regional Tiered Monitoring Program (\$ 80,000 - \$ 250,000) – Develop improved watershed monitoring capabilities using a tiered approach that incorporates the monitoring conducted by various existing entities including academia, regulatory agencies, local jurisdictions, and community organizations. The project would consist of (1) identifying and evaluating the various watershed and water quality monitoring efforts being conducted throughout the County, (2) working with the various entities conducting these programs to agree on consensus objectives, (3) developing a strategy for integrating monitoring results to support holistic watershed assessments, and (4) developing an approach / infrastructure to support the ongoing integration and dissemination of monitoring results.

Ongoing needs: On completion of the project, ongoing costs would be limited to maintenance and population of the database. Assuming that monitoring data are provided free of cost, ongoing maintenance should be less than \$ 5000 / yr.

5. On-line Citizen Monitoring Database (\$ 25,000 - \$ 75,000) – Work with academic, non-profit, and volunteer groups to develop consistency in citizen monitoring data formats to enable convenient access and dissemination through the County's Project Clean Water website or another appropriate vehicle. The project would consist of (1) identifying and evaluating the various citizen monitoring efforts being conducted throughout the County, (2) working with the various entities conducting these programs to reach consensus on standards for data submission, and (3) developing a internet-based system for data dissemination.

Ongoing needs: On completion of the project, ongoing costs would be limited to maintenance and population of the database. Assuming that monitoring data are provided free of cost, ongoing maintenance should be less than \$ 2500 / yr.

6. Rainbow Creek Pilot Nutrient Monitoring Program (\$ 175,000) – Develop a nutrient monitoring program for the Rainbow Creek basin to the support ongoing Total Maximum Daily Load (TMDL), and to serve as a model for future assessments of nutrient impairment in the County. The focus of this project would be to develop appropriate and reliable indicators of impairment, and to provide a basis for revision of water quality standards to better reflect local conditions. A variety of sources (septic systems, orchards, commercial nurseries, etc.), parameters (nitrates, phosphates, chlorophyll, etc.), and media (surface water, groundwater, and aerial deposition) would be investigated. After the implementation of an intensive two-year baseline characterization, ongoing monitoring would be conducted at reduced levels to evaluate trends and assess management measures.

Ongoing needs: No new additional costs would be associated with the completion of this project. The County is already obligated to conduct ongoing nutrient monitoring. Completion of this project could reduce those obligations.

7. Pilot Dry Weather Monitoring Program (\$ 40,000 - \$ 115,000) – Augment existing monitoring efforts to provide additional data for the unincorporated County. Urban stream bioassessment (\$ 75,000) would be conducted two times (spring and fall) at 50 locations to establish a comprehensive baseline of biological diversity in streams throughout the unincorporated County. Dry weather mass loading (\$ 40,000) would be conducted concurrently at two locations during the spring sampling to assess potential loadings and to evaluate potential relationships of chemical constituents to stream health.

Ongoing needs: As a pilot, this project would not obligate the County to conduct further work. If the County chooses to conduct ongoing monitoring, it would be at reduced levels, probably at an annual cost of \$ 20,000 - \$ 50,000.

8. Unincorporated Wet Weather Monitoring Program (\$ 150,000 - \$ 600,000) – Existing regionally conducted programs focus on the collection of monitoring data at the bottom ends of watersheds. This approach provides little information that can be used to directly assess upstream loadings or water body health. Additional data are necessary to provide a clearer picture of contaminant loadings from the unincorporated County. A pilot program would be initiated to develop an extensive baseline of conditions from the upstream portions of the 2-10 watersheds for which the County shares responsibility. This would provide a baseline for the ongoing implementation of a reduced and more focused program in future years (e.g., a lesser number of constituents would be tracked over time at key stations).

Ongoing needs: As a pilot, this project would not obligate the County to conduct further work. If the County chooses to conduct ongoing monitoring, it would be at reduced levels. Ongoing annual costs would probably be less than \$ 150,000.

9. Work plan for Evaluation of Total Dissolved Solids (TDS) and Nutrient Water Quality Objectives (\$ 100,000) – The Project Clean Water (PCW) Basin Planning Issues Workgroup has recommended to the RWQCB that the total dissolved solids (TDS) water quality objective be evaluated and revised to reflect local conditions. Assuming this project is accepted, funding of approximately \$ 100,000 would be needed to develop a work plan to define specific projects to be implemented under the management plan. This would include development of project costs and funding alternatives.

Ongoing needs: The completion of this work plan would not obligate the County to conduct further work. However, it should be noted that fully funding any of these projects is likely to cost several hundred thousand dollars each. The County would work with the Regional Board and other stakeholders to identify and secure such funding.

## **Database / Data Management**

10. Watershed-Based Data Management System (\$ 250,000 - \$ 750,000) - Develop and implement a data management infrastructure and database tools necessary to provide decision support for watershed and pollution management activities in the eleven coastal watersheds of San Diego County. Water quality data are currently gathered by numerous agencies, academic institutions, and other entities without regard for their regional integration or system-wide analysis. This system would increase the availability and improve the analysis of these data in support of federal, state, and local water quality and environmental resource management programs. It would also specifically support the San Diego Regional Board's ability to update its Basin Plan and Clean Water Act section 303(d) Impaired Waterbodies List.

Examples of activities to be funded include the evaluation of management objectives, the identification and integration of existing tabular and geo-spatial data for the County's watersheds into a comprehensive decision support framework, the transformation of selected analog non-point source and monitoring data into digital formats, the development of Geographic Information System (GIS) analytical and visualization technologies, and the dissemination of data and analytical tools to management agencies, researchers, and the public via the internet.



Ongoing needs: The completion of this system would not obligate the County to conduct further work. Ongoing database maintenance would likely cost less than \$ 5,000 / yr.

11. GIS-Based Watershed-Based Source Management Program (\$ 80,000 - \$ 100,000) – Using a “reverse engineering” approach, develop GIS and visualization tools and methodologies to assist managers in understanding the causes of water quality impairments. Examples of activities to be funded include the collection of existing source data, baseline assessment of contaminant levels in watersheds, development of source management agendas, development of visualization techniques to aid in source management, development of model programs for managing sources of contamination, and community outreach to convey results to interested parties. Although the project would focus on a specific priority constituent (e.g., bacteria), results would have broad applicability to other key problems.

Ongoing needs: The cost of ongoing use of this product would be limited to database maintenance and data acquisition for future projects. Data are generally publicly accessible at little or no cost; database maintenance should be less than \$ 5,000 / yr.

12. Stormwater Conveyance System Digitization (\$ 400,000) - The County has recently completed an effort to digitize the stormwater conveyance system that it operates and maintains. In defining and implementing this effort, the County necessarily excluded portions of the system for which it has not accepted maintenance responsibility (e.g., “private” facilities). This initial approach enabled the County to meet its short-term obligations under its Municipal Stormwater Permit, but longer term needs (e.g., system-wide modeling and analysis of flood control and water quality impacts) will require that the entire system, regardless of ownership or maintenance responsibility, be transformed to a GIS format. The purpose of the Santa Margarita Watershed Pilot Project is to collect and digitize conveyance system data for that portion of the Santa Margarita Watershed located within the unincorporated area of the County that will allow the development of a comprehensive GIS coverage. This will be accomplished through a combination of field mapping and records review / digitization. An important outcome of this project will be an assessment of the feasibility and costs associated with completing this task for the entire unincorporated County. A second important focus will be the identification of automated methods of digitization that can be applied during this project and to other similar future applications. This project will take 3-4 years to complete.

Ongoing needs: GIS coverages must be periodically updated to ensure their accuracy and integrity. These costs would be estimated as part of the project.

13. Flowage Easement Study (\$ 75,000 - \$ 100,000) - There are approximately 4000 flowage easements within the County that are not maintained. These easements can be a source of pollutants since we are unaware of the site conditions. A pilot study to locate, provide site conditions, and integrate into our MS4 GIS database could reduce potential pollutant loads and reduce County liability.

Ongoing needs: GIS coverages must be periodically updated to ensure their accuracy and integrity. These costs would be estimated as part of the project.

14. Project Clean Water Website Update (\$ 15,000 - \$ 25,000) – Over the past year, the County has established its Project Clean Water website as a regional source of watershed and water

quality information. To maintain this role, and ensure continued public interest in the site, additional content and functionality must be developed.

Ongoing needs: No additional costs are associated with completion of this project. It would likely be several years before a comprehensive update of the web site would be needed. Other, less extensive updates are within the capability of County staff.

15. Stormwater Program Database Centralization (\$ 300,000 - \$ 500,000) – In response to increasing Municipal Stormwater Permit requirements, the County has implemented a number of new and augmented programs. As such, data acquisition and management requirements have increased significantly. Due to the short time frames during which these new programs were developed, database and data management strategies have lagged behind, resulting in a de-centralized and fragmented approach to data assessment and reporting. To keep pace with increasing requirements, and to ensure that program data and information do not “sit on a shelf”, the County should invest in the development of a dynamic data management system that establishes a centralized “command center” through which program staff at all levels can access key data and information. This project builds on the concept already established through PB Views and would utilize internet or intranet capabilities such as the web portal recently developed for the MSCP.

Ongoing needs: Ongoing database and data maintenance costs would not increase over those currently associated with the many databases already in use. These costs could conceivably be reduced.

## **Outreach / Public Participation**

16. Regional Watershed and Water Quality Forums (\$ 25,000) – Conduct a series of workshops and other public forums to explore priority watershed, water quality, and environmental resource issues of regional significance. Pursue projects that strengthen coordination of efforts and improve the effectiveness of local water quality management activities in a manner consistent with the stated goals and objectives of Project Clean Water as articulated in the Clean Water Strategic Plan. For example, increasing the utilization of science and technology to develop innovative management practices, supporting compliance with water quality laws and regulations, and supporting various stakeholder and public participation forums such as the annual Clean Water Summit.

Ongoing needs: None.

17. Residential Baseline Awareness Surveys (\$ 60,000) – The Municipal Stormwater Permit requires that outreach programs measurably change the knowledge and behavior of targeted audiences, both for jurisdictional- and watershed-based program requirements. To assess program effectiveness in achieving these goals, a comprehensive baseline against which change can be measured must be established. A comprehensive regional survey of residents would be conducted to provide this baseline. A survey tool has already been designed. Additional funding would allow the inclusion of sample sizes necessary to ensure that statistically significant populations are sampled.

Ongoing needs: A follow-up survey (@ \$ 10,000 - \$ 15,000) would be needed within the next few years to evaluate program progress. This follow-up survey must be funded regardless of whether this expanded baseline survey is conducted.

18. Mass Media Campaign (\$ 100,000 - \$ 400,000) – Stormwater educational efforts to date have focused on reaching residents through a variety of approaches. Mass media such as television and radio are a part of this strategy, but are not highly emphasized because they are expensive. A one-time media blitz over the next two years would help to more firmly establish the stormwater pollution problem in the mind of the public and to encourage them to take ownership of the solutions. In subsequent years, mass media campaigns could be conducted at reduced levels to build on and reinforce these messages. To utilize economies of scale, this effort could be integrated with the City of San Diego's Think Blue campaign

Ongoing needs: None. The purpose of this project is to establish a solid framework on which subsequent (and already required) outreach efforts will be built.

19. School Curriculum Development (\$ 50,000) – Educators are currently working cooperatively to develop regionally consistent curricula to incorporate watershed and water quality principles into lesson plans. Additional funding would help to improve and complete this project sooner.

Ongoing needs: None. Future updates could be accomplished through the voluntary participation of educators and municipalities.

20. Regional Pesticide Use Reduction Campaign (\$ 150,000 - \$ 250,000) - Residential pesticide use is a problem of major concern in San Diego County. Examples of activities to be funded include point of purchase (POP) campaigns and training on Integrated Pest Management (IPM) for residents, training for pest control applicators, and training for managers and employees of retail establishments where pesticides are sold for home use.

Ongoing needs: None, unless the County and partners choose to conduct additional work. In future years, these concepts should be fully integrated into existing stormwater outreach programs.

21. Watershed Awareness Campaign (\$ 75,000 - \$ 150,000) – Instilling citizen ownership of watersheds and water quality is key to affecting long-term changes in behavior. In addition to providing a basis for other outreach efforts, a watershed awareness campaign would help to meet the watershed requirements of the Municipal Stormwater Permit.

Ongoing needs: None, unless the County and partners choose to conduct additional work. In future years, these concepts should be fully integrated into existing stormwater outreach programs.

### **Planning / Watershed Management**

22. Watershed Management Plans (\$ 50,000 - \$ 100,000 per watershed)– Augment current funding dedicated to the development of watershed management plans. Costs would depend on the level of funding already secured for each watershed.

Ongoing needs: Undetermined. The County's watershed planning efforts are still in their infancy. Completion of this project would not obligate the County to conduct additional planning work.

### **BMP Evaluation Projects**

23. Drain Inlet Insert Monitoring (\$ 25,000 - \$ 50,000). The County recently installed approximately 70 drain inlet inserts throughout the County. However, monitoring of the water quality downstream of these inserts has not been conducted. Relying on data gathered in other areas to assess program performance is problematic because rain patterns in Southern California are unique. Direct assessment of the performance of these devices would be beneficial.

Ongoing needs: None, unless the County elects to conduct similar work later (e.g., to further evaluate performance over the life of the project).

24. Roadway Maintenance Facility Monitoring (\$ 20,000 - \$ 60,000). DPW has put a variety of BMPs in place at its road maintenance stations to manage the stormwater impacts of stockpiles and equipment. However, it is currently not known how much and what types of pollutants run off these sites during storm events. County sites should be evaluated because they exhibit different pollutant loading characteristics than similar facilities experiencing different rainfall patterns. Results of monitoring conducted at several sites that represent different climatic conditions and site activities would be used to assess and modify control strategies to maximize their effectiveness, and to provide a baseline for measuring change against over time.

Ongoing needs: None, unless the County elects to conduct similar work later (e.g., to further evaluate performance over a longer period).





# State Water Resources Control Board



Gray Davis  
Governor

Winston H. Hickox  
Secretary for  
Environmental  
Protection

**Division of Water Quality**  
1001 I Street, Sacramento, California 95814 ♦ (916) 341-5487  
Mailing Address: P.O. Box 2231, Sacramento, California 95812  
FAX (916) 341-5808 ♦ Internet Address: <http://www.swrcb.ca.gov>

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption.  
For a list of simple ways you can reduce demand and cut your energy costs, see our website at [www.swrcb.ca.gov](http://www.swrcb.ca.gov).*

OCT 30 2003

Ms. Chandra L. Wallar, Assistant Director  
Department of Public Works  
County of San Diego  
5555 Overland Avenue  
San Diego, CA 92123-1295

Dear Ms. Wallar:

## COUNTY OF SAN DIEGO COMMENTS ON THE "DRAFT CALIFORNIA NONPOINT SOURCE PROGRAM FIVE-YEAR IMPLEMENTATION PLAN", July 2003

Thank you for taking the time to review and provide comments to the Draft Nonpoint Source (NPS) Five-Year Implementation Plan (Draft Five-Year Plan). It is of great value that your organization follows the progress of California's efforts on the NPS Program, and it is through your communications and others like yours, that a collaborative process for implementation of the NPS Program can occur.

You expressed in your August 29, 2003 letter some disappointment that only one activity (Chollas Creek pesticide monitoring) was planned for the San Diego Region. Since the Draft Five-Year Plan was made available to the public for review in June, a number of activities have been added by the San Diego Regional Water Quality Control Board for the San Diego area. A copy of these activities is enclosed with this letter, and it is worth noting that 18 of them are listed in the Urban Category. I hope this helps alleviate your concern, and affords the County of San Diego greater opportunities for collaboration with the agencies involved in these activities.

Additionally, your suggestions for funding have been forwarded to the State Water Resources Control Board's Division of Financial Assistance (DFA). The DFA staff are actively involved in the process of distributing grant and bond funds for NPS related activities.

Thank you again for taking the time to review and comment on the Draft Five-Year Plan. It is through these communications and others like them, that a statewide understanding of the importance of NPS Program implementation can occur. If you have any further questions, please do not hesitate to contact me at (916) 341-5487 or Margie Lopez-Read of the NPS Program Plan Implementation Unit at (916) 341-5533.

Sincerely;

Steve Fagundes, Chief  
NPS Program Plan Implementation Unit

Enclosures

cc: See next page

**California Environmental Protection Agency**

cc: Continuation page

Mr. Sam Ziegler  
Water Division, WTR-3  
United States Environmental Protection  
Agency, Region IX  
75 Hawthorne Street  
San Francisco, CA 94105

Mr. Al Wanger  
California Coastal Commission  
45 Fremont Street  
San Francisco, CA 94105

Mr. John L. Snyder, Director  
Department of Public Works  
County of San Diego  
5555 Overland Avenue  
San Diego, CA 92123-1295

Mr. Bruce Posthumous  
California Regional Water Quality  
Control Board, San Diego Region  
9174 Sky Park Court, Suite 100  
San Diego, CA 92124-1324

Ms. Barbara Evoy, Chief  
Division of Financial Assistance  
State Water Resources Control Board  
1001 I Street  
Sacramento, CA 95814