

**Report in Support of
U.S. Environmental Protection Agency's
Review of California's**

Continuing Planning Process

State Water Resources Control Board

May 2001

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[Appendix A](#): 1998 Clean Water Act Section 303(d) Listing Guidelines For California (August 11, 1997)

[Appendix B](#): Outline Of California Water Quality Control Planning

Appendix B – [Attachment 1](#): Standard Beneficial Use Definitions

Note: To learn more about the State and Regional Boards’ programs, log on to the Boards’ web site at: <http://www.swrcb.ca.gov> . You may contact Board staff with questions; a contact telephone list by name and by topic is found on the web at <http://www.swrcb.ca.gov/contact/index.html>.

**California State Water Resources Control Board:
Report in support of the U.S. Environmental Protection Agency's
review of the Continuing Planning Process**

May 2001

Introduction

The federal Clean Water Act (CWA) requires each state to have in place a "continuing planning process" (CPP) approved by the U. S. Environmental Protection Agency (EPA) [CWA 303(e)]. The Act also requires that EPA periodically review a state's planning process for conformity to the requirements of the Act. To facilitate its review of California's planning process, EPA has requested that the State Water Resources Control Board (State Board) submit a report describing the elements of its planning process. A draft of this document was submitted to EPA in the summer of 2000. Following review by EPA and requests for additional information, this document constitutes the State Board's report on its continuing planning process.

The CWA and federal regulations [40 CFR 130.5(b)] require that a state's continuing planning process include nine specific elements (see [page 27](#)). In addition to a discussion of those nine elements, this report offers EPA and the public a broad outline of all the major elements of the State and Regional Boards' water quality planning process, and points to source documents, many available at the State and Regional Boards' Internet Web sites, that give further information.

The State and Regional Boards' planning process includes, among other elements:

- Water quality planning programs (adoption, review, and amendment of state-wide and basin water quality control plans and policies), including development and adoption of TMDLs and implementation plans;
- Regulatory programs (permitting and control of discharges to water through "NPDES" and WDR permits, discharge to land – "Chapter 15", and storm water and storage tanks programs)
- Monitoring and quality assurance programs;
- Nonpoint source management programs, including the "Watershed Management Initiative";
- Funding assistance programs, including grants and loans.

These programs represent an overall planning process that involves the State and Regional Boards, EPA, other state and federal agencies, and

An Internet version of this document is at:

<http://www.swrcb.ca.gov/plnspols>

California has a central "State Board" and nine "Regional Boards"

The State Board's Web site is at:

<http://www.swrcb.ca.gov>

Regional Board Web sites may be found at:

<http://www.swrcb.ca.gov/regions.html>

Each surface water basin has its own "Basin Plan" which regulates water quality

TMDL:

"Total Maximum Daily Load" requirements, which limit pollutant inputs to a watershed.

NPDES: "National Pollutant Discharge Elimination System"

WDR: "Waste Discharge Requirements"

the public. The State Board conducts monthly meetings with EPA and with Regional Board Executive Officers to ensure that programs adequately address California's water quality issues, and the general public has monthly opportunities at Board workshops and hearings to contribute to the planning process. The Watershed Management Initiative also provides a broad forum in which water quality issues and resources to address them can be discussed among State and Regional Board staff, EPA, and local stakeholders. These types of "day-to-day" activities constitute an important aspect of the planning process.

This report comprises two sections. The [first section](#) provides a general description of the State and Regional Boards' water quality planning process, including information about various water quality activities and programs as implemented by the Boards. Additional details about the processes described can be found at various Internet Web sites developed by the State and Regional Boards and referenced in this section. These Web sites are continually updated as new information becomes available, and as the State Board's goal of making information readily available to the public over the Internet is being realized. The [second section](#) of this report provides descriptions of the nine elements of a state's planning process required by CWA §303(e) and 40 CFR 130.5(b).

Appendices to this report include the current guideline for listing waters of the State as impaired for purposes of CWA §303(d), and an outline of the State and Regional Boards' water quality planning process.

A current Web version of the topical directory of State and Regional Board contacts is at: <http://www.swrcb.ca.gov/contact/index.html>.

For additional copies of this document, please call our Office of Legislative and Public Affairs at (916) 341-5264 or contact Debbie Irvin by e-mail at Dirvin@exec.swrcb.ca.gov

General Overview of the State and Regional Boards' Planning Process

I. THE STRATEGIC PLAN and WATERSHED MANAGEMENT INITIATIVE

California's current continuing planning process is outlined in two recent State Water Resources Control Board documents which have been previously submitted to EPA.

The **Strategic Plan Update (1997)** articulates the goals, strategies, objectives, and performance measures used to guide ongoing decision-making and help ensure that the mission of the State and Regional Boards is accomplished. Specific objectives are associated with the Boards' goals and strategies, and these objectives are monitored on a regular basis in order to assess performance.

As a result of this strategic planning, the **Watershed Management Initiative (WMI)** was developed to:

- Define, promote, and implement watershed management to realize tangible, measureable improvements to the beneficial uses of water and water quality;
- Facilitate local stewardship among watershed stakeholders to promote the protection and restoration of natural resources;
- Create opportunities for the State and Regional Boards and EPA to define their most significant issues and direct resources to these issues;
- Describe the roles of various agencies in implementing watershed management.

The Division of Water Quality within the State Board and each of the nine Regional Boards have developed separate chapters in an extensive Watershed Management Initiative document. These chapters describe a five-year plan for implementing State and Regional Board programs. This document was updated in January, 2000 and is available to the public (many of the WMI chapters can be accessed through Regional Board Internet sites). The Regional Board chapters describe both watershed-specific and regionwide planning activities. WMI chapters include at a minimum a discussion of significant water quality problems, stakeholder groups, funding mechanisms, monitoring and assessment activities, TMDLs, basin plans, and permitting issues. Other activities such as each Regional Board's regionwide nonpoint source program, enforcement activities, CEQA review, and policy development are also discussed in detail in the WMI chapters.

The text of the Strategic Plan may be found at
<http://www.swrcb.ca.gov/strategicplan/index.html>

A summary of the Watershed Management Initiative is at:
<http://www.swrcb.ca.gov/watershed>

Each Regional Board has a Web site where information about its WMI activities may be found. These websites may be accessed at:

<http://www.swrcb.ca.gov/regions.html>

II. WATER QUALITY PLANNING

The water quality planning process consists primarily of developing, adopting, reviewing, and updating a variety of Statewide Water Quality Control Plans and Regional Water Quality Control Plans (Basin Plans) that contain enforceable water quality standards designed to ensure that the beneficial uses of California's waters are protected. Water quality standards contained in these plans are translated into effluent limitations written into NPDES permits and Waste Discharge Requirements. Both Statewide Plans and Basin Plans are subject to triennial review, which may lead to periodic updates. Adoption of these plans follows a prescribed process that involves public review and approval by the State Board, the Office of Administrative Law, and EPA.

A number of State Board water quality policies (for example, the "Sources of Drinking Water" Policy), as well as a variety of Regional Board policies have been developed over the years to help guide the planning process. These policies are adhered to when developing Basin Plan or statewide plan amendments and constitute an important part of the planning process. Lastly, the planning process is guided by the State and Regional Board resolutions, orders, and decisions that guide the day-to-day actions of the boards.

A. Statewide Planning

California's Statewide Water Quality Control Plans include the Ocean Plan, Bay-Delta Plan, Thermal Plan, and Freshwater and Estuarine Plan (in preparation). These Plans contain enforceable standards for the various waters they address.

1. Ocean Standards

Periodic review and proposal of amendments to the California **Ocean Plan** is the primary function of the State Board's Ocean Standards Program. In its role of interpreting the Ocean Plan, the program also provides technical support and recommendations to staff of the Regional Boards on issues related to ocean water quality and issuance of Waste Discharge Requirements to ocean dischargers. The Ocean Plan is mandated under Section 13170.2 of the Porter-Cologne Water Quality Control Act which requires that:

- The State Board formulate and adopt a water quality control plan for ocean waters of the State known as the California Ocean Plan;
- The Ocean Plan shall be reviewed at least every three years to guarantee that the current standards are adequate and are not allowing degradation to indigenous marine species or posing a threat to human health.

The federal Clean Water Act requires states to:

- Adopt water quality standards – designated beneficial uses and numeric or narrative criteria (water quality objectives) – to protect surface waters
- Hold public hearings at least triennially for the purpose of reviewing water quality standards
- Adopt numeric criteria for toxics

State and Regional Board policies may be found at

<http://www.swrcb.ca.gov/plnspols>

A further discussion of Water Quality Control Plans is on [page 36](#)

The Ocean Plan is on the Web at:

<http://www.swrcb.ca.gov/plnspols>

The Ocean Plan sets physical, chemical, biological, and bacteriological standards for protection of beneficial uses of the State's ocean waters. These standards form the basis for preparing NPDES Permits and Waste Discharge Requirements issued by the Regional Boards to ocean dischargers.

Near-coastal waters are the downstream recipient of flow from most of California's watersheds. As such, upstream activities must be managed so as not to adversely affect downstream near-coastal waters. Under a federal regulation at 40 CFR 131.10(b), the State is required, when designating beneficial uses of a water body and the appropriate water quality objectives for those uses, to consider downstream water quality standards and to ensure that the upstream standards provide for attainment and maintenance of the downstream standards. (This requirement is often referred to as the "tributary rule".)

While the Ocean Plan applies to both point and nonpoint source pollution, the Ocean Plan's current implementation procedures are largely designed for control of point sources. For example, water quality objectives are used to derive effluent limitations for permit-regulated waste discharges to the ocean, and to set conditions recommended by the Regional Boards for inclusion in US Army Corps of Engineers Section 404 permits for disposal of dredged materials. However, the Ocean Plan also requires that nonpoint sources meet water quality objectives, and these sources may be addressed by adopting a watershed management approach to implementing the Ocean Plan.

2. Bay-Delta Standards

The Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (**Bay-Delta Plan**) establishes objectives for the protection of the estuary's beneficial uses from the effects of salinity (from saltwater intrusion and agricultural drainage) and water project operations (flows and diversions). This plan supplements other water quality control plans and policies adopted by the State and Regional Boards relevant to the Bay-Delta Estuary watershed. These plans and policies include:

- San Francisco Bay and Central Valley Regional Basin Plans
- Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California ("Thermal Plan")
- Statement of Policy with Respect to Maintaining High Quality Waters in California (Antidegradation Policy)
- State Policy for Water Quality Control
- Sources of Drinking Water Policy
- Water Quality Control Policy for Enclosed Bays and Estuaries
- Water Quality Control Policy on the Use and Disposal of Inland Waters Used for Power Plant Cooling
- Policy with Respect to Water Reclamation in California
- Pollutant Policy Document for the San Francisco Bay/Sacramento-San Joaquin Delta

The water quality objectives in the Bay-Delta Plan will be implemented by assigning responsibilities to water right holders, since the factors to be

The Ocean Plan was adopted in 1972 and amended in 1978, 1983, 1988, 1990, 1997, and 2000. The most recent triennial review was completed in July 1999.

The Bay-Delta Plan is on the Web at:
<http://www.swrcb.ca.gov/plnspols>

Implementation of the Bay-Delta Plan is accomplished through adoption of water right decisions, water quality control policies, and water quality control plans.

controlled are primarily related to flows and diversions. The State Board is currently engaged in the process of determining the specific responsibilities of major water right holders in the Bay Delta system for objective compliance.

3. Thermal Standards

Another of the State Board's statewide water quality control plans is the "Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California", commonly known as the **Thermal Plan**. The Thermal Plan sets limits on the discharge of elevated temperature wastes into coastal, estuarine, and interstate waters of California. The plan distinguishes between "cold" and "warm" interstate waters. Special provisions are included for control of "thermal waste", defined as cooling water and industrial process water used to carry waste heat, e.g., from power plants. The Thermal Plan contains prohibitions, water quality objectives, and effluent limitations. The plan also empowers a Regional Board, with State Board concurrence, to grant a discharger exceptions from specific water quality objectives or effluent limitations of the Plan.

The Thermal Plan was first adopted by the State Board in 1971, and was amended in 1972 and 1975. The amendments generally addressed implementation measures contained in the plan. The 1975 amendments changed the provisions for granting exceptions to the Plan, requiring conformity with Section 316(a) of the federal Clean Water Act. The Thermal Plan is currently undergoing review, scheduled for completion in the 2001-2002 State fiscal year.

Thermal Standards for waters not covered by the Thermal Plan (i.e., many inland waters) are contained in the several Basin Plans.

4. Freshwater and Estuarine Standards

Development and review of the California **Enclosed Bays and Estuaries Plan** (EBEP) and the California **Inland Surface Waters Plan** (ISWP) is the primary function of the State Board's Freshwater and Estuarine Standards Program. These two statewide water quality control plans establish water quality standards for toxic pollutants to protect beneficial uses of the non-ocean surface waters of the State. In addition, the program provides technical support to State and Regional Board staff on issues related to estuarine and fresh water quality, and implementation of water quality standards.

The EBEP is mandated under Section 13391 of the Porter-Cologne Water Quality Control Act. Specifically, this section requires that the State Board formulate, adopt, implement, review, and update a water quality control plan for enclosed bays and estuaries. Section 13390 of the act expresses the legislative intent that the State and Regional Boards establish programs to provide maximum protection for existing and

The Thermal Plan is available on the Web at:

<http://www.swrcb.ca.gov/plnspols>

CWA Section 316(a) requires that a discharger, before being granted an exception from thermal discharge standards, demonstrate that protection of "balanced indigenous populations" of fish and shellfish will be maintained.

California's Porter-Cologne Water Quality Control Act is available through the State Board's Web site: http://www.swrcb.ca.gov/water_law

future beneficial uses of bay and estuarine waters, further the compliance with federal law regarding identification of waters where toxic pollutants threaten the protection and propagation of aquatic life, and develop effective strategies to control toxic pollutants.

The program is responsible for developing a comprehensive statewide program for the protection of the beneficial uses of the inland surface waters, enclosed bays, and estuaries of California from the effects of toxic discharges, consistent with the intent of the State and federal mandates. A primary component of the ISWP and EBEP is the establishment of water quality objectives and a program of implementation to protect the uses for all non-ocean surface waters of the State. Using the ISWP and EBEP as tools, point and nonpoint source discharges that impact, or have the potential to impact, beneficial uses within freshwater or estuarine watersheds can be better managed in a coordinated and cost-effective manner.

The current editions of the ISWP and the EBEP were invalidated by a 1994 court decision. In the absence of state-wide surface water quality standards for toxics, as required by the CWA, EPA has issued the **California Toxics Rule (CTR)** – published in the Federal Register, Vol.65, No.97, May 18 2000, pp 31682-31719 – which sets federal criteria for surface waters in the state. In March 2000, the State Board adopted an **Implementation Policy** for the CTR. This policy, which became effective in April 2000, represents the first phase in the development of a new ISWP and EBEP. In the interim, the policy provides the basis for implementing priority toxic pollutant standards in NPDES permits for discharges to non-ocean surface waters.

B. Basin Planning

California's Basin Plans are the basis of the Regional Boards' water quality planning program. They provide the foundation for each Regional Board's regulatory activities, inform the public of regional water quality goals and requirements, and establish the basis for cooperative watershed management

All basin plans contain implementation programs that describe the actions necessary to achieve water quality objectives, establish a time schedule for complying with them, and describe the surveillance and monitoring activities needed to determine compliance. The nature of actions to be taken to meet water quality objectives include, but are not limited to, development of Waste Discharge Requirements (WDRs) which also serve as NPDES permits for point-source discharges, establishment of water-quality based effluent limitations, prohibitions of discharge, and establishment of TMDLs. Monitoring activities to determine compliance with water quality objectives include discharger self-monitoring required under WDRs and NPDES permits, watershed-based monitoring, or monitoring undertaken by Regional Boards as a result of inspections or other special projects.

[§](#)

A CTR fact sheet and the full text is available at:
<http://www.epa.gov/ost/standards/ctrindex.html>

The Implementation Policy is at:
<http://www.swrcb.ca.gov/iswp>

See also [page 30](#) for Compliance Schedules under the CTR Policy

Regional Board information about Basin Planning may be found at:

North Coast (Region 1):
<http://www.swrcb.ca.gov/rwqcb1/programs/basinplan/basin.html>

San Francisco (Region 2):
<http://www.swrcb.ca.gov/rwqcb2/basinplan.htm>

Central Coast (Region 3):
<http://www.swrcb.ca.gov/rwqcb3/BasinPlan/Index.htm>

Los Angeles (Region 4):
http://www.swrcb.ca.gov/rwqcb4/html/meetings/tmdl/Basin_plan/basin_plan_doc.html

Central Valley (Region 5):
http://www.swrcb.ca.gov/rwqcb5/available_documents/index.html#anchor616381

Triennial review of basin plans are State or Regional Board actions requiring an adopting resolution. Triennial reviews are comprehensive and include a public hearing to identify issues to be addressed, which may include appropriateness of water quality standards, new water quality problems, and violations of water quality objectives. Changes in federal or state laws may also dictate the need for basin plan amendments. The State or Regional Boards evaluate all available information to determine whether revisions to basin plans are needed and the nature of any necessary revisions.

Amendments to a Basin Plan are initiated by the appropriate Regional Board, and follow state and federal requirements for public participation and for environmental and economic consideration. Amendments adopted by a Regional Board must be approved by the State Board. Regulatory provisions of amendments must be further approved by the State Office of Administrative Law (OAL), and do not go into effect until approved by OAL. Surface water quality standards amendments must also be approved by EPA, and do not go into effect until approved by EPA.

C. Total Maximum Daily Loads (TMDLs)

The Federal Clean Water Act [Section 303(d)] requires states to develop lists of waters that do not meet water quality standards and to implement a planning process known as Total Maximum Daily Loads (TMDLs). Once developed, TMDLs are in most cases adopted as amendments to Basin Plans. The TMDL process involves determining the amount of pollutants that can be allowed in each water body without exceeding water quality standards, and allocating responsibility for managing those pollutants. California's "Porter-Cologne" Water Quality Control Act (Section 13242) requires that any TMDL implementation program be adopted as a Basin Plan amendment.

The activities necessary to develop TMDLs include the following:

- Organize stakeholder participation to address the pollutants of concern;
- Define the water quality problems and sources of the problems;
- Develop goals for future water quality conditions;
- Design an implementation strategy and assign responsibility for implementation;
- Adopt a Basin Plan amendment that includes the goals and implementation strategy.

The State Board's Division of Water Quality supports the Regional Board's TMDL activities through a TMDL team of water quality program staff that coordinates a periodic TMDL roundtable with participation of all Regional Boards and EPA.

Lahontan (Region 6):
http://www.swrcb.ca.gov/rwqcb6/BPlan_Index.htm
Colorado River Basin (Region 7):
<http://www.swrcb.ca.gov/rwqcb7/documents/RB7Plan.pdf>
Santa Ana (Region 8):
<http://www.swrcb.ca.gov/rwqcb8/pdf/R8BPlan.pdf>
San Diego (Region 9):
<http://www.swrcb.ca.gov/rwqcb9/programs/basinplan.html>

A convenient searchable form of the Basin Plans is available through the U.C. Berkeley's "e-library" at:
http://elib.cs.berkeley.edu/cgi/doc_query?orderby=author&where_doc_type=basinplan

See also a discussion of the **Basin Plan** review process on [page 33](#)

California's 303(d) list and TMDL schedule is on the Web at:
<http://www.swrcb.ca.gov/plnspols/wgplans/303d98.pdf>

Regional Board information about TMDL activities may be found at:

North Coast Region:
<http://www.swrcb.ca.gov/rwqcb1/programs/tmdl/Status.html>
San Francisco Bay Region:
<http://www.swrcb.ca.gov/rwqcb2/tmdlmain.htm>
Central Coast Region:
<http://www.swrcb.ca.gov/rwqcb3/TMDL/index.htm>
Los Angeles Region:
http://www.swrcb.ca.gov/rwqcb4/html/programs/regional_programs.html#Standards
Central Valley Region:
<http://www.swrcb.ca.gov/rwqcb5/programs/tmdl/index.htm>
Lahontan Region:
http://www.swrcb.ca.gov/rwqcb6/TMDL/TMDL_Index.htm
Colorado River Basin Region:
<http://www.swrcb.ca.gov/rwqcb7/tmdl>
Santa Ana Region:
<http://www.swrcb.ca.gov/rwqcb8/html/tmdls.html>

D. California Environmental Quality Act (CEQA) Compliance

1. Lead and review role

CEQA requires that, with few exceptions, all projects which could impact environmental quality must have an environmental review process conducted before projects are approved. Environmental documents, such as an “Initial Study” and/or an “Environmental Impact Report” is prepared by the project’s lead agency and routed through the State Clearinghouse in the Office of Planning and Research (OPR) to appropriate agencies for review. The State and Regional Boards receive nearly 4000 CEQA documents for review each year from the Clearinghouse, and at least an equivalent number directly from local project proponents. Most of these environmental documents are for projects which need one or more of the following regulatory actions from the State or Regional Boards: Section 401 water quality certifications, NPDES permits, or State Waste Discharge Requirements. Review of these documents for water quality impacts is a major task of the State and Regional Boards.

The State and Regional Boards fulfill different roles with respect to CEQA:

The Regional Board:

- Reviews CEQA documents generated by lead agencies and provides comments regarding overall adequacy of the document, water quality impacts that need to be addressed or are inadequately addressed, and the need for permits, certification, or mitigation from the Regional Board. For some projects participation in hearings conducted by the lead agency is necessary. Environmental documents reviewed include notice of intent and draft and final negative declarations, environmental impact reports, and environmental impact statements.
- Participates on multi-agency working groups and scoping teams to review project proposals in the early stages, and assists project proponents in the development of projects which will have minimal adverse environmental consequences and be more readily permissible by the water boards and other agencies with jurisdiction.

The State Board:

- Coordinates State and Regional programs, policy development, legal review, and training.
- Reviews CEQA documents which have statewide or multi-regional impact.
- Coordinates State and Regional activities and concerns with the CEQA control agencies (the Resources Agency and OPR).

San Diego Region:

<http://www.swrcb.ca.gov/rwqcb9/tmdls/tmdl.html>

See a further discussion of TMDL activities on [page 31](#)

State agency CEQA responsibilities and processes are detailed in the CEQA Guidelines, on the Web at: http://ceres.ca.gov/topic/env_law/ceqa/guidelines/

- Acts as CEQA lead agency for projects that have statewide significance, such as water quality certification for the U.S. Army Corps of Engineers' Nationwide Permits. The State Board is most often the lead agency in conducting its water rights permitting authority.

2. “Functional Equivalence” of planning process

The California Environmental Quality Act (CEQA) authorizes the Secretary for Resources to certify specific regulatory programs of State agencies as being “functionally equivalent” to the requirements of CEQA for preparation of environmental documentation, such as “Initial Study” and “Environmental Impact Report”. All basin plans, statewide plans and plan amendments are subject to CEQA; however the State Board’s water quality planning process has been certified by the Secretary for Resources as “functionally equivalent to,” and therefore exempt from, CEQA's requirement for preparation of an environmental impact report or negative declaration and initial study. However, the CEQA-required Environmental Checklist must be completed.

Reference: California Code of Regulations (CCR) Title 14, §15251(g)

III. REGULATORY PROGRAMS

A. Discharges to Surface Waters--NPDES Permits

1. Point Sources

The National Pollutant Discharge Elimination System (NPDES) program is intended to ensure, to the greatest extent possible, that discharges to surface waters do not adversely affect the quality and beneficial uses of such waters. NPDES permits are required by all dischargers, municipal, industrial, and others that discharge pollutants from any point source into waters of the United States [40 CFR Part 122.1]. Agricultural activities are not subject to NPDES permits.

Permit effluent limitations are set to attain or maintain the water quality that assures protection of all beneficial uses, and must comply with the effluent limitations adopted under Sections 301, 302, 306, 307, and 405 of the CWA and, when applicable, any more stringent limitations necessary to meet water quality standards or prohibitions. All permit requirements must also comply with the Basin Plan and any state-wide water quality control plans, and any plan approved pursuant to Section 208(b) of the CWA.

Some permits for discharges to water bodies that do not yet meet water quality objectives may require effluent limitations which are more stringent than those required by Sections 301, 302, 306, 307, and 405 of the CWA. In such instances, a waste load allocation is prepared or site-specific calculations are used to ensure that the discharge will allow

See a further discussion of the Boards’ NPDES responsibilities on [page 27](#), and workplan development on [page 39](#)

Regional Board staff’s permitting activities include developing and issuing NPDES permits, including:

- Processing and reviewing NPDES applications
- Preparation of pre-notice draft permits, draft NPDES permits, and Regional Board agenda items
- Inspections, meetings, or

achievement of applicable water quality standards.

An appropriate monitoring and reporting program is included in all permits. The monitoring program may require the discharger to use adequate monitoring equipment or methods at the discharger's expense, including biological monitoring methods. Each effluent flow or pollutant is monitored at intervals sufficiently frequent to yield data which reasonably characterize the nature of the discharge. All parameters limited in the permit are monitored, with monitoring frequency for a specific parameter determined by the Regional Board.

2. Storm Water

In 1972, the federal Clean Water Act (then the Water Pollution Control Act) was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with an NPDES permit. The 1987 amendments to the CWA added Section 402(p) which establishes a framework for regulating municipal and industrial storm water discharges under the NPDES Program. In 1990, EPA published final regulations that establish application requirements for storm water permits. The regulations require that storm water associated with industrial activities that discharge either directly to surface waters or indirectly through separate municipal storm sewers must be regulated by an NPDES permit. A separate statewide general permit has also been issued for construction activity.

There is a four-tiered permit issuance strategy for storm water discharges associated with industrial activity, as follows:

- Tier I, Baseline Permitting – One or more general permits will be developed to initially cover the majority of storm water discharges associated with industrial activity.
- Tier II, Watershed Permitting – Facilities within watersheds which are shown to be adversely impacted by storm water discharges associated with industrial activity will be targeted for individual or watershed-specific general permits.
- Tier III, Industry-Specific Permitting – Specific industry categories will be targeted for individual or industry-specific general permits.
- Tier IV, Facility-Specific Permitting – A variety of factors will be used to target specific facilities for individual permits.

The regulations allow authorized states to issue general permits or individual permits to regulate storm water discharges. Consistent with Tier I, Baseline Permitting, the State Board issued a statewide General Permit in November, 1991 that applied to all storm water discharges requiring a permit except construction activity. Monitoring requirements in this General Permit were amended in September, 1992. To obtain

negotiations necessary to gather information and resolve issues relevant to preparation of an NPDES permit

Additional information about the State Board's Stormwater Program can be found at:
<http://www.swrcb.ca.gov/stormwtr/index.html>

For more information about industrial and construction storm water permits, consult the following references, available from the SWRCB Storm Water Program:

Fact Sheet for Water Quality Order No. 97-03-DWQ, NPDES General Permit No. CAS000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities

Fact Sheet for Water Quality Order No. 99-08-DWQ, NPDES General Permit for Storm Water Discharges Associated with Construction Activity

authorization for continued and future storm water discharge under this General Permit, each facility operator must submit a Notice of Intent. The General Permit requires operators to eliminate unauthorized non-storm water discharges; develop a Storm Water Pollution Prevention Plan; and, perform monitoring of storm water discharges and authorized non-storm water discharges.

While federal regulations allow two permitting options for industrial storm water discharges (individual and general permits), the State Board has elected at this time to adopt only one statewide General Permit that will apply to all storm water discharges associated with construction activity. Exceptions to this include Tribal Lands (which are regulated by an EPA permit), the Lake Tahoe Hydrologic Unit (regulated by a Regional Board NPDES permit), and Caltrans (regulated by a separate permit issued by the State Board). The General Permit requires all dischargers where construction activity disturbs five acres or more to eliminate or reduce non-storm water discharges to storm sewer systems and other waters, implement Best Management Practices (BMPs), and perform inspections of all BMPs.

The State Board participates and cooperates with the California Storm Water Task Force, which advises the State Board on storm water matters from the perspective of NPDES-permitted municipal stormwater agencies and other interested parties.

B. Discharges to Land and Ground Water— Waste Discharge Requirements

Waste Discharge Requirements (WDRs) are issued under State law pursuant to Section 13263 of the Water Code and apply to dischargers that discharge waste to land or to. The disposal method may be either by agricultural or non-agricultural irrigation, ponds, landfills, monofills, or leachfields.

Any person discharging waste or proposing to discharge waste that could affect water quality (other than to a community sewer system) or who makes a material change to a currently regulated discharge must file a complete ROWD at least 120 days prior to commencing the discharge or making a material change [CWC Sections 13260, 13264].

Similar to NPDES requirements, all WDRs contain effluent limitations, provisions for maintaining an administrative record, and monitoring and reporting requirements.

C. Contained Discharges

1. “Chapter 15” Land Disposal Program

Title 23, Division 3, Chapter 15 of California Code of Regulations (CCR), contains regulatory requirements for hazardous waste. Title 27

The Stormwater Task Force website may be found at:
<http://www.casqa.org/>.

Regional Board staff’s activities involved in developing and issuing WDRs include:

- Processing and reviewing Reports of Waste Discharge (ROWD);
- Preparation of proposed WDRs;
- Participation in Board meetings as they relate to proposed WDRs
- Inspections or meetings necessary to gather information for the preparation of WDRs

contains regulatory requirements for wastes other than hazardous waste. Further, section 13260(a) of the California Water Code requires that any person discharging waste or proposing to discharge waste, other than to a community sewer system, that could affect the quality of the waters of the State, must file a report of waste discharge. This report must outline the types of wastes to be discharged in order to determine appropriate waste management unit design, operation, monitoring, closure and postclosure maintenance requirements. The first step in Chapter 15 and Title 27 regulation is the classification of wastes discharged to land according to risk they pose to water quality, and determine appropriate waste management options.

The Chapter 15 Program is part of the State Board's Core Regulatory Program for waste treatment, storage, or disposal sites. The State Board is required to develop regulations to "ensure adequate protection of water quality and statewide uniformity in the siting, operation, and closure of waste discharge sites." The regulations establish a classification system for waste and disposal sites and include requirements for siting, construction, operation, monitoring and cleanup, and closure. Program functions include issuance and amendment of waste discharge requirements, inspections to determine compliance, review of dischargers' self-monitoring reports, review of other technical reports, review of closure plans, and informal and formal enforcement actions. Statewide, the Program regulates over 850 waste treatment, storage, or disposal sites (landfills, surface impoundments, waste piles, and land treatment units).

2. Underground Storage Tank (UST) Program

The mission of the UST program is to preserve and enhance the quality of California's water resources by promoting leak prevention through guidance and providing training to the regulated community and local regulators. The program carries out this mission by:

- Developing UST regulations pursuant to Chapter 6.7 of the Health and Safety Code.
- Issuing policy letters referred to as "LG" letters to local agencies to provide guidance on technical issues.
- Issuing licenses to UST tank and piping testers.
- Developing UST program guidelines and other documents to educate local agencies and the regulated community.
- Providing guidance to local agencies and the regulated community regarding technical UST issues through periodic training classes, seminars, and conferences.
- Enhancing statewide coordination and consistency of local agency implementation of the UST program requirements through a local agency visit program and as a participant Cal/EPA's Unified Program (UP) evaluation .

Further information about the State Board's Chapter 15 Program is at: <http://www.swrcb.ca.gov/cwphome/land/>

Get more information about the UST Program on the Web at: <http://www.swrcb.ca.gov/ust/index.html>

The above site also links to California's UST regulations which are found in California Code of Regulations (CCR) Title 23, Division 3, Chapter 16, Articles 1 to 10

3. Aboveground Petroleum Storage Tank Program (AGT)

In 1989, the California Legislature found that in order to protect the state's people and natural resources from aboveground petroleum storage tank spills, an inspection program was necessary. (The Legislative findings included, "There are 65,000 or more aboveground tanks in the state which hold a variety of dangerous substances ... Aboveground storage tanks have been found to leak and spill into the ground and water, causing major contamination problems.") The Aboveground Petroleum Storage Act (Act) became effective January 1, 1990. In general, the Act requires owners or operators of aboveground petroleum storage tanks (limited to facilities storing "petroleum" in a single tank greater than 660 gallons or facilities storing "petroleum" in aboveground tanks or containers with a cumulative storage capacity of greater than 1,320 gallons) to file a storage statement, pay a fee by July 1, 1990, and prepare and implement a spill control plan to prevent spills. The fee, which is paid biennially, ranges from \$100 for a site storage capacity of less than 10 thousand gallons to \$30,000 for a storage capacity of more than 100 million gallons. The fees are deposited into the State Environmental Protection Trust Fund. Funds are used for program activities such as facility inspection, enforcement, and cleanup oversight by Regional Board staff. (Farms, nurseries, logging, or construction sites are exempted from preparing a spill control plan if these businesses have a total storage capacity of less than 100,000 gallons or if their individual storage tanks are less than 20,000 gallons, but these facilities must still submit a storage statement and fee and comply with the conditions stated in Section 25270.5(d) of the Health and Safety Code.)

The Regional Board conducts periodic facility inspections to determine compliance with the spill control plan, and a local Certified Unified Program Agency may also check to verify whether a spill control plan is in place at the facility, and will then refer their finding to the Regional Board for follow-up. The State Board does not issue permits for tank construction. These are issued by local building authorities.

IV. MONITORING AND QUALITY ASSURANCE

A. Monitoring and Assessment Program

The State Board's Monitoring and Assessment Program provides information to the State and Regional Boards, the public, and EPA on the state of the State's waters. Activities of the program include compiling water quality monitoring and assessment data for fresh, estuarine, ocean, and ground waters, as well as a yearly beach closures report to the legislature. The Program provides technical assistance to Regional Boards, other agencies, local groups and other Division Programs for watershed monitoring and assessment. Assistance includes study design, coordination among participants, field monitoring, reporting, and project

Get more information about the AGT program on the Web at: <http://www.swrcb.ca.gov/cwphome/agt/index.html>

evaluation. The program is the lead in the State Board's investigation of sources, loads, and impacts of stormwater pollutants discharged to the ocean coastline, as required by CWC Section 13181. Program staff are working with the Southern California Coastal Water Research Project, San Francisco Estuary Institute, and Moss Landing Marine Laboratory to gather information statewide.

The program administers three water quality monitoring programs widely relied upon by the State and Regional Boards to identify impaired waterbodies and the causes of impairment: The Toxic Substances Monitoring Program (TSMP), the State Mussel Watch Program (SMWP), and the Toxicity Testing Program (TTP).

The TSMP measures concentrations of toxic chemicals in freshwater fish statewide to determine their safety for human consumption and to identify polluted sites. The TSMP data are one of the major sources of monitoring data used by Regional Boards for CWA Section 303(d) listing for many metals and bioaccumulative organics as well as the basis for fish consumption advisories (postings and fishing regulations).

The SMWP is one of the major sources of information used by the Regional Boards to classify the water quality condition of marine waters. The data collected by SMWP provide the basis for 303(d) listing for many metals and bioaccumulative organics.

The TTP measures the toxicity of ambient water to three freshwater species (water flea, larval minnow, and green alga). Toxicity testing is an integrative and cumulative measure of bioavailable toxicants in a water sample. Additional physical/chemical testing methods are used to identify the chemical causes of toxicity. The TTP data provide the basis for most 303(d) listings for toxicity and for pesticides in current use.

The Water Quality Assessment (WQA) is a report to the public on the condition of the State's waters. The WQA catalogs water quality information for the entire state, organized by Region and by water body type. The information is compiled from Regional Board reports which assess the quality of each water body, the degree of beneficial use support, and whether the water body is listed on the CWA Section 303(d) "impaired waters" list.

B. Quality Assurance (QA)

1. Laboratory QA

Quality assurance activities are mandated by federal regulation [40CFR 205(j)] for all federally funded water quality studies and compliance monitoring that generate environmental laboratory data. The State Board has extended these federally required activities to all State and Regional Board studies involving collection and analysis of environmental samples.

Reports of the TSMP and SMWP can be found on the Web at:
<http://www.swrcb.ca.gov/programs/smw>

CWA section 305(b) requires states to report biennially to EPA on the State's water quality. The 305(b) report summarizes water quality information by water body type, beneficial use support, and the major causes and sources impacting uses.

The QA Program provides data review assistance and environmental laboratory expertise to Regional Board staff involved in the review of compliance and environmental data quality. Although each Regional Board is responsible for data quality review, due to restricted resources Regional Board staff look to the QA Program for assistance. The QA Program provides examinations, investigations, and expert testimony on data quality or laboratory issues.

The QA Program provides training to all Regional Board staff reviewing data. Currently, training includes: “Fundamentals of Quality Assurance – Errors in Laboratory Measurements”; “Minimum Levels – Support and Development of the Proposed Minimum Level Process”; “Reviewing Laboratory Procedures”; and “Auditing Laboratory Data”. Additional topics are being developed.

A contract with the University of California at Davis provides statistical services, expert opinions, and resources that may be needed in the evaluation of data and environmental trends. A contract with the Department of Health Services provides reference materials and referee laboratory services that may be needed in the evaluation of data quality or in cases of suspected data quality fraud.

2. Scientific Peer Review

State law requires that when departments in the California Environmental Protection Agency (including the State Board) adopt regulations which have a scientific basis, the scientific data and analysis which serve as the basis for the regulation must undergo peer review in a manner specified in law. The State Board has contracted with the University of California to provide the needed peer review services. Amendments to Basin Plans and state-wide water quality control plans, including TMDLs, are peer reviewed prior to adoption by the State or Regional Board. The results of the peer review are made available to the public and become part of the administrative record of the regulatory action.

External scientific peer review is required by the California Health and Safety Code, Section 57004

Further discussion of scientific peer review is on [page 34](#)

V. NONPOINT SOURCE PROGRAM

The State Board’s Nonpoint Source (NPS) Program is responsible for statewide NPS program management, and for providing administrative and technical support for the program for the State and Regional Boards.

Nonpoint Source is defined to mean any source of water pollution that does not meet the legal definition of “point source” in CWA 502(14). Nonpoint pollution is the pollution transported by rainfall and snow melt moving over and through the ground, finally depositing natural and manmade pollution into lakes, rivers, wetlands, coastal waters and ground waters. Atmospheric deposition and hydrologic modification are also considered nonpoint sources of pollution.

More information about the NPS Program is on the Web at: <http://www.swrcb.ca.gov/nps>

The State Board NPS Program supports the Regional Boards' effort to control NPS pollution by: developing annual workplans for the program; providing administrative support in the form of resource budgeting, developing budget items, assisting with budget verification, contract development, administration, and tracking; producing semi and annual reports on outputs and program expenditures to EPA; providing technical and program support through roundtables; providing information technology support for geographical information systems (GIS) via access to the Teale GIS Data Library for tracking and assessing NPS projects around the State.

The NPS Program also provides administrative support for several other activities involved in addressing nonpoint source pollution. Primary among these activities are the Coastal Zone Management Act Reauthorization Amendment (CZARA) Program, the Agricultural Drainage Management Program, and the Delta Tributary Watershed Program.

A. Coastal Zone Management Act Reauthorization Amendment (CZARA) Program

The primary function of CZARA is to fulfill the statutory requirements of the Coastal Zone Act Reauthorization Amendment §6217 to develop a coastal nonpoint pollution control program. This function is embodied in an "Action Plan" agreed to by the State Board, the California Coastal Commission (CCC), EPA Headquarters, NOAA, and EPA Region 9. The "Action Plan" entails a Management Measure Review and development of a 5-year Implementation Strategy and a 15-year Implementation Plan. These activities will serve as an update of the State Board's Nonpoint Sources Management Plan and include priorities from the Watershed Management Initiative chapters.

The Regional Board's Watershed Management Initiative (WMI) chapters, which stipulate Regional Board priorities, are used in the development of the 5-year and 15-year Implementation Strategy and Plans. Regional Board staff also review all documentation for CZARA to provide a local perspective, and attend and contribute to roundtable discussions on methods to comply with CZARA. Regional Board staff further incorporate CZARA requirements into all other nonpoint source aspects of their work, including education and outreach to local communities. Regional Board staff are instrumental in assisting local entities in the actual implementation of management measures and in preventing nonpoint source pollution.

B. Agricultural Drainage Management Program

The Division of Water Quality administers the Agricultural Drainage Management Program (ADMP) for both loans and grants. The ADMP

For information about the "Nonpoint Source Program Strategy and Implementation Plan" and "California Management Measures for Polluted Runoff" see:

<http://www.swrcb.ca.gov/nps>

The two primary federal statutes that establish a framework for addressing NPS pollution are CWA Section 319 and CZARA Section 6217. State Authority comes from the Porter-Cologne Water Quality Act.

loan and grant programs support the Regional Board watershed activities by providing a financial incentive to solving agricultural drainage related pollution problems within watersheds. Through close coordination with watershed planning efforts, the ADMP can be used to fund these high priority agricultural drainage related watershed activities. Technical and administrative aspects of the ADMP loan and grant programs include: tracking fund balances; outreach; project and environmental review; contract preparation; project inspection; progress payment review and approval; loan repayment schedules; and, project close-out.

C. Delta Tributary Watershed Program

Proposition 204 provided \$14.5 million for grants to local agencies to fund watershed rehabilitation projects in the Sacramento, San Joaquin, and Trinity River Watersheds. Release of the grant funds was contingent on numerous statutory conditions that crossed over agency boundaries and authorities and was mandated to the State Board. Accordingly, the State Board issues Request for Proposals, coordinates the review and ranking of proposed projects for State Board approval, coordinates with CALFED, negotiates and executes contracts for the projects, administers general bond sale schedules, manages contracts in cooperation with the Regional Boards and will close the grant program in an audit-ready process. These technical and administrative responsibilities are only partially reimbursed from the Delta Program funds.

The Delta Program provides technical and administrative support in the following areas:

- RFP preparation and distribution
- Advisory Committee coordination and facilitation
- State Board approval
- Contract negotiation and execution
- Contract oversight, management, and invoice payment
- General Bond sales and tracking
- Delta Program financial close-out

D. Water Quality Certification Section 401 Process

Before anyone can obtain a federal permit for any activity that may result in a discharge to a surface water of the United States, they must obtain certification from the appropriate state pursuant to Section 401 of the Clean Water Act. Section 401 provides the states with a mechanism to ensure that federally-permitted activities meet state requirements to protect water quality. In California, applications for water quality certification are filed with the appropriate Regional Board. The application must contain a full description of the activity involved, a complete copy of the federal application for whatever federal license or permit is being sought by the applicant, and a copy of any final

Background on California's 401 certification process can be found in: [Environmental Law News, v..3, no.3, Fall, 1994](#)

environmental document prepared for the activity. There is also an application fee. Most 401 certifications involve projects in wetlands, which must be approved by the Army Corps of Engineers (Corps) under Section 404 of the Clean Water Act.

In performing a review of an application for certification, the Regional Board considers whether it should issue or waive Waste Discharge Requirements (WDRs). If the Regional Board decides to issue or waive WDRs, it informs the applicant, the federal licensing agency, and EPA that it will take no further action, since any discharge that is covered by WDRs or a waiver is presumably in compliance with water quality standards. Regional Boards always have the option of regulating discharges which are subject to 401 authority through WDRs.

Certification under Section 401 must be based on a finding that the proposed activity will comply with water quality standards. These are defined by EPA to include designated uses, water quality criteria to protect those uses, and an antidegradation policy. In order to certify that a project is in conformance with water quality standards, the State Board must determine that the project will not cause a violation of water quality objectives found in Basin Plans, that the affected water body is being protected for its designated beneficial uses, and that the project meets the requirements of the state's antidegradation policy. Certification must address all impacts to water quality from both the construction and operation of the entire project, and does not just include those impacts that result from point source discharges.

Under California law, a discretionary approval by a public agency of a project that may have a significant effect on the environment is subject to the requirements of the California Environmental Quality Act (CEQA). The provisions of CEQA also apply to 401 certifications since the activities covered by the certification will result in a physical change to the environment and the certification also involves the discretionary issuance of a permit. CEQA compliance must be established before a 401 certification is issued.

E. Abandoned Mine Program

The State Board's Abandoned Mine Program provides direct assistance to regional staff working on the problem of water pollution from abandoned mines statewide. Activities primarily include site investigations and water quality monitoring. The program provides direct assistance to Regional Board watershed initiatives where mine pollution is an issue. Activities include holding semiannual meetings of State and Regional Board staff who work on abandoned mine issues. These meetings serve as a forum for sharing experiences, raising issues, and identifying training needs. Program staff act as liaison to other agencies (for example, the US Geological Survey, Department of Toxic Substance Control, Department of Conservation, and EPA) that deal with abandoned mine issues. The program provides technical expertise

The State Board's antidegradation policy may be found at: <http://www.swrcb.ca.gov/plnspols/wqplans/res68-16.pdf>

to Regional Board staff in the following areas: acid mine drainage, metal release from mine waste, water quality monitoring, mine waste characterization, fate and transport evaluations for metals, and new technology for abating pollution from abandoned mines.

VI. FUNDING ASSISTANCE PROGRAMS

A. Water Quality Planning Program [205(j)(2)/604(b)]

The federal Clean Water Act authorizes the set-aside of a portion of the CWA's annual State Revolving Fund appropriation to assist states and local governments with water quality planning. The CWA requires that at least 40% of these planning funds be passed through to "regional comprehensive planning organizations," generally meaning local (not state government) public entities. Use of these funds are limited by law to water quality planning activities, including monitoring work.

The State Board is the recipient agency for these funds for the State of California. The funds are administered by the Water Quality Planning Program. Funds are disbursed to applicant agencies through an annual competitive application process. Available funds are generally contracted out for two to three year planning projects.

In accordance with guidance from EPA and the State Board's Watershed Management Initiative committee, a significant proportion of the available 205(j) funds have been awarded for the purpose of preparing local Watershed Management Plans. Typical recipients of these funds have been Resource Conservation Districts and other local agencies who have indicated a commitment to broad-based watershed planning, and the program has required that the plan's development be a cooperative venture with full stakeholder involvement. Development of TMDLs has also been a recent priority for this program.

B. Section 319(h) Nonpoint Source (NPS) Grant Program

The purpose of the Section 319(h) NPS Grant Program is the administration and management of federal Clean Water Act Nonpoint Source Pollution Control Grants through statewide NPS activities. These grants provide funds for implementation projects directed at improving water quality. Section 319(h) NPS Grant Program activities include oversight of the Program's daily operations, resolving technical problems, and providing responses to management and public requests on a variety of issues. The activities support new and existing watershed efforts and stakeholder groups, provide technical expertise, public outreach, and education to local groups and Regional Board staff, and collaborate with other state and federal agencies on NPS issues.

CWA Section 205(j)(2) authorizes the Water Quality Management Planning Program; Section 604(b) provides annual federal appropriations.

Statewide NPS activities support Regional Board staff by assisting in the development and maintenance of contract/project administration, contract tracking, and resolution of contract administrative issues; provide assistance to interested parties and Regional Board staff regarding the Section 319(h) Program; and provide support to Regional Boards and potential Section 319(h) project proponents for the development of targeted watershed proposals. NPS staff provide technical expertise to Regional Boards and outside agencies.

Staff provides technical assistance in the preparation of State Board contract packages, the development and tracking of progress and payments of contracts, and assists in the contract award process. Staff also develops and provides an annual NPS Program contract management/preparation training course, prepares and distributes an annual Request for Proposals, updates and maintains the interested parties mailing list, responds to staff and public inquiries, assists in updating project fiscal and technical information on EPA's mainframe-based Grants Reporting and Tracking System, prepares State Board agenda items, and maintains the NPS Home Page on the Internet that features NPS publications and activities.

C. Underground Storage Tank (UST) Funding Program

The Underground Storage Tank Cleanup Fund Act of 1989 created this program to help owners and operators of underground storage tanks satisfy federal and State financial responsibility requirements and to assist with the cost of cleanup of contaminated soil and ground water caused by leaking petroleum tanks. The fund also provides coverage for third-party liability due to releases.

The fund requires every owner of a petroleum underground storage tank that is subject to regulation to pay a per gallon storage fee to the fund. This fee, which was begun in 1991, currently generates more than \$170 million annually.

To be eligible to file a claim against the fund, a person must be a current owner or operator of a petroleum underground storage tank which has released petroleum and which is subject to State regulation. Owners of small home oil tanks which have released petroleum are also eligible. Other eligibility conditions include compliance with applicable State permit requirements and regulatory agency cleanup orders.

The implementing legislation for the fund sets forth a claim priority system which is based on claimant characteristics. The highest priority, Class A, is given to residential owners; Class B is given to small businesses, governmental agencies, and nonprofit organizations with gross receipts below a specified minimum; Class C is given to California businesses, governmental agencies, and nonprofit organizations having fewer than 500 employees; and Class D is given to all other claimants. The priority list is updated at least once a year to include new claims.

More on the State Board's UST Cleanup Fund at:
<http://www.swrcb.ca.gov/cwphome/ustcf>

D. Water Recycling Programs

The State Board's Office of Water Recycling provides financial assistance for water reclamation projects. The assistance is in the form of low-interest loans for project construction and grants for project planning. The State Board also provides information on wastewater reclamation and reuse by various agencies throughout California.

Efficient use of water is critical to maintain the economy and quality of life of California. Goal 3 of the State Board's Strategic Plan is to encourage balanced and efficient use of water through water transfers, recycling and conservation. Water recycling or reclamation involves treating the wastewater sufficiently to protect public health, storing the recycled/reclaimed water until it is needed, and delivering the water to points of use. The uses can include practically the entire spectrum of water uses, from irrigating crops and landscaping to feeding cooling towers in power plants.

The Office of Water Recycling administers two funding programs for water reclamation: The Water Recycling Loan Program and the Water Recycling Facilities Planning Grant Program.

E. State Revolving Fund (SRF)

The Federal Water Pollution Control Act, as amended in 1987, provides for establishment of a State Revolving Fund (SRF) loan program capitalized both by a grant awarded to the State of California by the U.S. Environmental Protection Agency (U.S. EPA) and by State Bond Funds. SRF loans are intended to assist local agencies in funding the following types of water pollution control projects: implementation of NPS pollution control projects or programs; development and implementation of estuary conservation and management programs, and construction of wastewater treatment facilities.

SRF loans can be used for implementation of a Watershed Plan which consists of specific actions, measures, or structural improvements to improve, enhance or protect the beneficial uses of water within a watershed area. Some examples would be construction of demonstration projects, retention/detention basins, wet ponds, infiltration strips, grassy swales or any other structures intended to remove pollutants originating from NPSs. NPS loans can also be used for training, public education, technology transfer, ordinance development, development of pollutant source reduction management practices, or any activity associated with control of NPSs of pollution.

In addition to loans to public agencies, the SRF can provide assistance to private parties with eligible NPS or estuary enhancement projects. One method is through the Linked Deposit Program. The Linked Deposit

More on the State Board's water recycling programs at:
<http://www.swrcb.ca.gov/recycling/index.html>

Generally, NPS pollution arises from one of the following sources, and projects and programs intended to reduce pollutant loading from these sources are eligible for funding:

- Urban Runoff
- Construction/Land Development
- Road Construction and Maintenance
- Agricultural Surface Runoff
- Agricultural Subsurface Drainage
- Grazing/Dairies
- Abandoned Mines
- Silviculture
- Hydrologic Modification

A further discussion of the SRF is on [page 38](#)

Program is an agreement between the SWRCB, a local or State agency in charge of watershed or estuary management, and a financial institution such as a bank or a credit union.

To establish a Linked Deposit Program, the local or State agency receives approval from the SWRCB following the above procedures for a specified dollar amount to implement a Watershed Plan or an Estuary Conservation and Management Plan. The agency then issues Certificates of Qualification to homeowners, businesses or other private parties with eligible projects. The private party is then eligible to apply for a conventional loan from a participating financial institution at a reduced interest rate.

F. “Proposition 13” Bond Funds and Related Funds

In March 2000, California voters approved Proposition 13 (2000 Water Bond), which authorizes the State of California to sell nearly two billion dollars of general obligation bonds to support safe drinking, water quality, flood protection and water reliability projects throughout the state. The State Water Resources Control Board (SWRCB) will help allocate \$763.9 million of these funds to local projects.

The **Clean Water State Revolving Fund** (SRF – see also [page 22](#)) provides low-interest loans for the construction of publicly-owned wastewater treatment and water reclamation facilities, implementation of nonpoint source and stormwater pollution control activities, and for estuary enhancement activities. Loans are available for municipalities, nonprofit organizations, and private parties. The program is capitalized by grants from EPA requiring a 20 percent State match. The Proposition 13 funds will be used to match the federal SRF capitalization grant. The Bond Act authorizes \$23.5 million for these loans. The funds are continuously appropriated.

The **Seawater Intrusion Control Loan Program** provides low-interest loans to local agencies to design and construct seawater intrusion control facilities in a basin where groundwater is threatened by seawater intrusion, that is subject to a local groundwater management plan, and where restrictions on groundwater pumping, a physical solution, or both, are necessary to prevent the destruction of, or irreparable injury to, groundwater quality. The Bond Act authorizes \$35 million for this program. The funds are continuously appropriated.

The Seawater Intrusion Control Loan Program in Proposition 13 is identical to the program in the 1996 Bond Law (Proposition 204). Proposition 13 provides additional funds and rolls the 1996 Bond Law funds into its subaccount.

The **Small Communities Grant Program (SCG)** will provide assistance for grants to construct publicly-owned wastewater treatment facilities in communities with less than 10,000 people. Maximum grant

Proposition 13 authorized \$1.97 billion for water projects.

The text of Prop.13 can be found through this site:

<http://www.swrcb.ca.gov/prop13>

Get details of this fund at:

http://www.swrcb.ca.gov/prop13/html/srf_bond.htm

A further discussion of the SRF is on [page 38](#)

Get details of this fund at:

http://www.swrcb.ca.gov/prop13/html/seawater_bond.htm

assistance is limited to \$3.5 million per project, or 97.5 percent of the eligible project cost, whichever is less. The Bond Act authorizes \$34 million for this program. The funds are continuously appropriated.

The SCG program in Proposition 13 is identical to the SCG program in Proposition 204 (1996 Bond Law) except that the eligible population has been increased from 5,000 to 10,000 people and a grant assistance limit of 97.5 percent of the State and federal funding to 97.5 percent of State funding. The SCG program authorized by the 1996 Bond Law was administered using the Small Community Grant Policy of April 30, 1997. All the funds available for SCG assistance under the 1996 Bond Law have been encumbered.

The **Wastewater Construction Grants** is a new program in Proposition 13 and will provide local construction assistance grants to the cities of Stockton, Manteca, Tracy, and Orange Cove for the construction of wastewater treatment facilities. The Bond Act authorizes \$35.5 million for these grants, but does not indicate the amount of grant funding each community should receive. The program is subject to annual appropriation by the Legislature

The **Water Recycling Financial Assistance Program** provides both low-interest loans and grants to local agencies to construct water recycling facilities (from a fund of \$53.2 million), provides grants up to \$75,000 to local agencies for planning of water recycling facilities (from a fund of \$49.5 million), and provides funds for research and studies (from a fund of \$3.2 million). Proposition 13 rolls the funds for water recycling from the 1988 and 1996 Bond Laws into a new Proposition 13 account. Proposition 13 also requires that 60 percent of the funds for design and construction of facilities be allocated to projects in the Counties of Riverside, Ventura, Los Angeles, San Diego, Orange, or San Bernardino, and that 40 percent of the funds be allocated to projects in the remaining counties. The 1984 Bond Law remains separate, provides low interest loans up to \$10 million for design and construction of facilities, and has no geographic restrictions.

The **Nonpoint Source Pollution Control Program** provides grants to municipalities, local public agencies, and nonprofit organizations for nonpoint source projects. The maximum funding provided for each project is \$5 million. Sixty percent of the funds will be allocated to projects in the Counties of Los Angeles, Orange, Riverside, San Diego, San Bernardino, and Ventura. Forty percent of the funds will be allocated to projects in the remaining counties. \$100 million are available in this fund, and funding is subject to annual appropriation by the Legislature.

The SWRCB implemented a similar program under the Delta Tributary Watershed Program of Proposition 204. Thirty-one projects are underway or near implementation for Sacramento, San Joaquin, and Trinity River Watersheds for a total funding of \$14.5 million. Federal

Get details of this fund at:

http://www.swrcb.ca.gov/prop13/htm/scg_bond.htm

Get details of this fund at:

http://www.swrcb.ca.gov/prop13/htm/wwwconst_bond.htm

Get details of these funds at:

http://www.swrcb.ca.gov/prop13/htm/recycling_bond.htm

Get details of this fund at:

http://www.swrcb.ca.gov/prop13/htm/nps_bond.htm

Clean Water Act section 319 projects have also implemented similar, but smaller, projects.

The **Coastal Nonpoint Source Program** provides grants to municipalities, local public agencies, nonprofit organizations, and educational institutions for coastal nonpoint source projects. The maximum funding provided for each project is \$5 million. Two special designated projects for Huntington Beach and San Diego are identified. Sixty percent of the funds will be allocated to projects in the Counties of Los Angeles, Orange, Riverside, San Diego, San Bernardino, and Ventura. Forty percent of the funds will be allocated to projects in the remaining counties. \$90 million are available in this fund, which is subject to annual appropriation by the Legislature

Get details of this fund at:

http://www.swrcb.ca.gov/prop13/htm/coastal-nps_bond.htm

The State Board implemented a similar program under the Delta Tributary Watershed Program of Proposition 204. Thirty-one projects are underway or near implementation for Sacramento, San Joaquin, and Trinity River Watersheds for a total funding of \$14.5 million. Federal Clean Water Act Section 319 projects have also implemented similar, but smaller, projects.

The **Watershed Protection Program** provides grants to municipalities, local agencies, or nonprofit organizations to develop local watershed management plans and/or implement projects consistent with watershed plans. Sixty percent of the funds will be allocated to projects in the Counties of Los Angeles, Orange, Riverside, San Diego, San Bernardino, and Ventura. Forty percent of the funds will be allocated to projects in the remaining counties. \$90 million are available in this fund, which is subject to annual appropriation by the Legislature.

Get details of this fund at:

http://www.swrcb.ca.gov/prop13/htm/watershed_bond.htm

The State Board implemented a similar program under the Delta Tributary Watershed Program of Proposition 204. Thirty-one projects are underway or near implementation for Sacramento, San Joaquin, and Trinity River Watersheds for a total funding of \$14.5 million. Federal Clean Water Act Section 319 projects have also implemented similar, but smaller, projects.

The **Southern California Integrated Watershed Program** is a new program that will provide local assistance to SAWPA for the following types of projects in the Santa Ana River Watershed: basin water banking; contaminant and salt removal through reclamation and desalting; removal of nonnative plants, and the creation of new open space and wetlands; programs for water conservation and efficiency and stormwater capture and management; and, planning and implementation of a flood control program to protect agricultural operations and adjacent property, and to assist in abating the effects of waste discharges. The SWRCB has previously provided loan funding to SAWPA for similar types of projects. It is expected that the State Board will appropriate Proposition 13 funds for this program in FY 2000-01. The Bond Act authorizes \$235 million for allocation to SAWPA for specified types of

Get details of this fund at:

http://www.swrcb.ca.gov/prop13/htm/sawpa_bond.htm

projects; the funding is subject to annual appropriation by the Legislature.

The **Elsinore and San Jacinto Watershed Program** is a new program that will provide local assistance to a joint powers agency for watershed management and flood control projects consistent with the Lake Elsinore Management Plan that accomplish one or more of the following: preserve agricultural land; protect wildlife habitat; protect and enhance recreational resources; and, improve lake water quality

The Bond Act authorizes \$15 million for grants to fund specified types of projects in the Lake Elsinore and San Jacinto Watersheds; the program is subject to annual appropriation by the Legislature.

Get details of this fund at:
http://www.swrcb.ca.gov/prop13/htm/elsinore-jacinto_bond.htm

Nine Specific Elements Required by 40 CFR 130.5(b)

The following discusses the elements of a “Continuing Planning Process” which are specifically required by the CWA and federal regulations. Discussion of these is assembled here for convenience, under headings corresponding to the nine issues specified in 40 CFR 130.5(b). Most of these issues are further discussed elsewhere in this report, and references to such sections are given below.

1. The process for developing effluent limitations and schedules of compliance that are required by Sections 301(b)(1), 301(b)(2), 306, and 307.

The State issues NPDES permits in accordance with a Memorandum of Agreement (MOA) between EPA and the State Board. Regional Board staff, in issuing NPDES permits, follow time lines indicated in the MOA for submission of applications, pre-notice draft permits, and other materials relevant to permit development. EPA may comment upon or object to the issuance of a permit or the terms or conditions therein. Neither the State Board nor the Regional Boards adopt or issue an NPDES permit until all objections made by EPA have been resolved pursuant to 40 CFR Part 123.44 and the MOA.

The Regional Boards send EPA and the State Board copies of applications, pre-notice draft permits, draft permits, adopted permits, and associated Fact Sheets and/or Statements of Basis for all NPDES individual permits proposed and/or adopted by the Regional Board and for all enrollees under general NPDES permits.

The State Board is responsible for supporting and overseeing the Regional Boards' management of the NPDES Program in California. In performing this function, the State Board has the responsibility to (1) evaluate Regional Board performance in the area of permit content and procedure, compliance, monitoring and surveillance, quality assurance of sample analysis, and program enforcement; (2) provide technical assistance to the Regional Boards such as information about regulations, policies, plans, changes, and decisions regarding the NPDES program; (3) develop and implement regulations, policy, and guidelines to maintain consistency between State and federal programs; (4) review decisions of the Regional Boards upon petition from aggrieved persons; and (5) assist the Regional Boards in implementing the federal program.

Regional Boards have the following responsibilities: (1) regulate all discharges subject to the NPDES program, except those reserved to EPA; (2) adopt or take other decisive action on NPDES permit applications within 180 days of the date of application; (3) maintain management control over the permit program to ensure that it conforms to State laws, regulations, and policies; (4) implement federal program provisions; (5) provide technical assistance to the regulated community; (6) assure that no one realizes an economic advantage from noncompliance; and, (7) maintain an adequate public file for each permittee.

For additional information, the following references are available from the State Water Board:

National Pollutant Discharge Elimination System (NPDES) Permits, SWRCB, Division of Water Quality, staff document, May 1998

Waste Discharge Permits, SWRCB Division of Water Quality, staff report, May 1998

See also the discussion on the **NPDES Program** on [page 10](#)

Permit effluent limitations contained in NPDES permits comply with those adopted under Sections 301, 302, 306, 307, and 405 of the federal Clean Water Act. More stringent effluent limitations may be used in permits where necessary to protect the beneficial uses of waters by meeting water quality standards or prohibitions. All permit requirements must also comply with the Basin Plan and any state-wide water quality control plans, and any plan approved pursuant to Section 208(b) of the CWA. Where effluent limitations are not specified in water quality control plans or other regulations, they may be calculated from existing receiving water quality objectives by use of dilution factors specific to the discharge and/or location. Effluent limitations are adopted by Regional Boards following public notice and hearing.

Compliance Schedules

For discharges of toxic pollutants into inland surface waters, enclosed bays, and estuaries of California, the State Board has developed a policy that includes provisions for establishing compliance schedules which denote when conformance with regulations must be met. This policy sets forth implementation provisions for priority pollutant criteria promulgated by the USEPA through the National Toxics Rule (NTR) and the California Toxics Rule (CTR), and for objectives established for priority pollutants by Regional Boards in their basin plans.

Based on an existing discharger's request and demonstration that it is infeasible for the discharger to achieve immediate compliance with a CTR criterion or an effluent limitation based on a CTR criterion, a Regional Board may establish a compliance schedule in an NPDES permit. (For discharge of pollutants which do not have federal NTR/CTR criteria, Regional Boards may include compliance schedules in NPDES permits only if authority for the Regional Board to grant permit compliance schedules is specified in the Basin Plan. Three Regional Boards – the “San Francisco Bay”, “Central Valley”, and “Los Angeles” Boards – have such authority.) Compliance schedules are not allowed in permits for new dischargers.

A compliance schedule includes a series of required actions to be undertaken for the purpose of achieving effluent limitations demonstrates reasonable progress toward their attainment. The compliance schedule includes a schedule for completion that reflects a realistic assessment of the shortest practicable time required to perform each task, and contains a final compliance date based on the shortest practicable time required to achieve compliance. The deadlines to complete each action in the compliance schedule is specified in the NPDES permit and is accompanied by interim requirements. When a compliance schedule exceeds one year from the date of permit issuance, interim limitations with specific compliance dates are included in the NPDES permit. If the final compliance date extends beyond the permit term, the final compliance date and supporting explanation are included in the permit findings.

The California Ocean Plan specifies the method of calculating effluent limitations from water quality objectives for ocean dischargers.

For more on the “Policy for Implementation...” of the CTR, see [page 7](#)

The schedule of compliance for point source dischargers in an NPDES permit is designed to be as short as practicable, but in no case exceed the following:

- Up to five years from the date of permit issuance, reissuance, or modification to complete actions (such as pollutant minimization or facility upgrades) necessary to comply with CTR criterion-based effluent limitations limitations that are derived with or without a TMDL. Such actions include the development and adoption of a site-specific objective, if appropriate.
- Up to fifteen years to develop and adopt a TMDL and accompanying waste load allocations and load allocations.

The discharger submits to the Regional Board the following justification before compliance schedules may be authorized in a permit: (a) documentation that diligent efforts have been made to quantify pollutant levels in the discharge and the sources of the pollutant in the waste stream, and the results of those efforts; (b) documentation of source control and/or pollution minimization efforts currently underway or completed; (c) a proposed schedule for additional or future source control measures, pollutant minimization actions, or waste treatment (i.e., facility upgrades); and (d) a demonstration that the proposed schedule is as short as practicable.

In no case, unless an exception has been granted, does a compliance schedule for these dischargers exceed (a) ten years to establish and comply with CTR criterion-based effluent limitations; or (b) twenty years to develop and adopt a TMDL.

TMDL Compliance Schedules

The compliance schedule provisions for the development and adoption of a TMDL only applies when: (a) the discharger requests and demonstrates that it is infeasible for the discharger to achieve immediate compliance with a CTR criterion, or with an effluent limitation based on a CTR criterion; and (b) the discharger has made appropriate commitments to support and expedite the development of the TMDL. In determining appropriate commitments, the Regional Board should consider the discharge's contribution to current loadings and the discharger's ability to participate in TMDL development.

For bioaccumulative priority pollutants for which the receiving water has been included on the CWA Section 303(d) list, the Regional Board should consider whether the mass loading of the bioaccumulative pollutant(s) should be limited to representative, current levels pending TMDL development in order to implement the applicable water quality standard.

Interim Requirements Under a Compliance Schedule

If a compliance schedule is granted, or a schedule is allowed for collecting data needed to establish water quality-based effluent limitations for a CTR criterion, the Regional Board establishes interim effluent requirements and dates for their achievement in the NPDES permit. If the compliance schedule exceeds one year, the Regional Board establishes interim numeric limitations for the priority pollutant in the permit and may also impose interim requirements to control the pollutant, such as pollutant minimization and source control measures. Numeric interim limitations for the pollutant must be based on current treatment facility performance or on existing permit limitations, whichever is more stringent. If the existing permit limitations are more stringent, and the discharger is not in compliance with those limitations,

the noncompliance under the existing permit must be addressed through appropriate enforcement action before the permit can be reissued, unless antibacksliding provisions are met.

If the compliance schedule is within the term of the permit, the final effluent limitations are included in the permit provisions. If the compliance schedule exceeds the length of the permit, the final effluent limitations are included in the permit findings. In the latter case, the findings include: (1) the water quality to be achieved; (2) the reason that a final water quality-based effluent limitation is not being incorporated into the permit as an enforceable limitation at this time; (3) a statement that it is the intent of the Regional Board to include, in a subsequent permit revision, the final water quality-based effluent limitation as an enforceable limitation (based either on the CTR criterion directly or on future regulatory developments, such as TMDL or site-specific objective development). The permit findings also state the appropriate enforcement actions that may be taken by the Regional Board if interim limitations and requirements are not met.

2. The process of incorporating areawide waste management plans under Section 208 and applicable basin plans under Section 209.

Section 208 of the 1972 amendments to the Federal Water Pollution Control Act (Clean Water Act) required the development of areawide waste treatment management plans (areawide plans) for the control of point and nonpoint sources of pollution, the establishment of regulatory programs, and the designation by the states of management agencies to implement the areawide plans. The Governor of California has designated nine Areawide Waste Management Planning agencies for California (see margin). For all areas of the State not covered by the mandates of these nine agencies, the State, through the State Board, is the planning agency. Each designated "208 agency" prepared a Water Quality Management Plan for its area, and these were approved by the State Board. The State Board, as the state-wide planning agency, acting through the regional boards, incorporated waste treatment planning into the State's ten basin plans, and these were adopted as the state-wide waste management plan.

Section 208-funded planning activities and grants in California were officially completed in December 1985, when the State Board adopted Resolution No. 85-91, entitled "Close-Out of the Federal Section 208 Areawide Waste Treatment Management Planning Program Grants for California." However, the State Board continues to hold the responsibility and authority to approve any updates to the areawide plans.

Designated Section 208 planning agencies may agree or contract with other agencies having management or regulatory authority, in order to accomplish the aims of the 208 management plans. For this purpose the

Section 208 Waste Treatment Management Plans have been developed by the following nine designated Areawide Waste Management Planning agencies in California:

Association of Bay Area Governments,
Association of Monterey Bay Area Governments,
San Diego Association of Governments,
Sacramento Area Council of Governments,
Southern California Association of Governments,
Ventura County Board of Supervisors,
Tahoe Regional Planning Agency,
United States Forest Service, and
United States Bureau of Reclamation.

State Board, as the state-wide planning agency, has entered into “Management Agency Agreements” (MAA) with several state and federal management agencies, which take on the responsibility of developing (jointly with the State Board) and implementing appropriate Water Quality Management Plans for their area of authority.

Designated areawide waste management planning agencies are required to keep an updated Section 208 Plan, in order to be eligible to receive certain federal funds. To update an areawide plan, the designated agency submits its request with the desired changes to the State Board. State Board staff review the request and work with Regional Board staff to ensure that all Regional Board concerns are addressed. Both a public workshop and a public Board meeting is held, where public comment is received, before the update is acted on by the State Board. The update must be approved by the State Board to constitute a legitimate update. In the last five years, Ventura County and Tahoe Regional Planning Agency have updated their Section 208 Plans.

Section 209 of the federal Clean Water Act initially required the creation of Water Quality Management Plans (Basin Plans) to be completed by 1980. These are further discussed below ([page 33](#)).

3. The process for developing TMDLs and individual water quality based effluent limits.

The federal Clean Water Act Section 303(d) requires states to develop TMDLs. The Porter Cologne Act requires the State and Regional Water Boards to implement programs to protect and maintain water quality throughout the State. The authority brought to bare in TMDLs spans many code Sections of the Water Code and includes authorities and responsibilities articulated in other codes, e.g. CEQA compliance. Assembly Bill 982 (Duchany) of 1999 established Water Code Section 13191 which requires the State Board to establish one or more committees to advise the Board on approaches to satisfying Section 303(d) of the federal Clean Water Act. Committees have been convened and are in the process of making recommendations to the Board.

TMDLs in California are developed either by RWQCBs or by USEPA. TMDLs developed by RWQCBs are designed as Basin Plan amendments and include implementation provisions. TMDLs developed by USEPA typically contain the total load and load allocations required by Section 303(d), but do not contain comprehensive implementation provisions. This stems from the fact that USEPA authorities related to implementation of nonpoint source pollution control measures are generally limited to education and outreach as provided by CWA Section 319. TMDLs are currently required for all waters and pollutants on the 303(d) list. TMDLs must consider and include allocations to both point

For more on MAA agencies and procedures, see [page 34](#)

For additional information about TMDLs, consult the following references:

[Guidance for Developing TMDLs in California](#), EPA Region 9; on the Web at: <http://www.epa.gov/region09/water/tmdl>

[1998 Clean Water Act \(CWA\) Section 303\(d\) Listing Guidelines for California](#), SWRCB, Division of Water Quality, August 21, 1997

More about TMDLs can also be found at <http://www.swrcb.ca.gov/tmdl>

See also the discussion of TMDLs on [page 8](#)

sources and nonpoint sources of listed pollutants. Although the abbreviation stands for “Total Maximum Daily Load,” the limitations contained in a TMDL may be other than “daily load” limits. There also can be multiple TMDLs on a particular water body, or there can be one TMDL that addresses numerous pollutants. The basis for grouping is whether or not there can be a common analytical approach to the assessment or a common management response to the impairment.

Steps for Developing TMDLs

There are five steps in producing a TMDL:

- *Involve Stakeholders*: Stakeholders can be the general public, business interests, government entities, environmental groups, or anyone concerned with a particular water body. Stakeholders are involved at the beginning of the process in order to provide input to the RWQCBs on the development of TMDLs.
- *Assess water body*: In this step, pollution sources and amounts, or “loads,” are identified for various times of the year. Then the overall effect of these loads on the water body is determined.
- *Define the total load and Develop allocations*: To ensure water quality standards are met and beneficial uses are attained, allocations of pollutant load to all sources are established for the pollutant(s) in question. TMDLs can address single pollutants or combinations of pollutants. The sum of the allocations must result in the water body attaining the applicable water quality standards. Federal regulations provide that TMDLs can be expressed as mass, thermal energy, toxicity or other appropriate measures. In California, toxicity and other appropriate measures often serve as the basis for TMDLs. As watershed management efforts mature it is likely that an increased dependence on measures other than mass or thermal energy will serve as the basis for TMDLs.
- *Develop implementation plan*: This step is a description of the approach and activities to be undertaken to ensure the allocations are met and identification of parties responsible for carrying out the actions.
- *Amend the Basin Plan*: Federal law requires that TMDLs be incorporated into the Basin Plans. The Basin Plan is a legal document that describes how a Regional Board would manage water quality. The TMDLs must be formally incorporated into the Basin Plan to be part of the basis for Regional Board actions. Basin Plan amendments are adopted through a public process that requires

A schedule for completing California TMDLs is found at:
<http://www.swrcb.ca.gov/nps>

approval of the TMDLs by a Regional Board, the State Board, the Office of Administrative Law, and USEPA Region 9.

Total Maximum Daily Loads (TMDLs), required under Clean Water Act Section 303(d), describe the planning activities required when water quality standards are not meeting effluent limits. TMDLs are being developed in several different ways in California. One approach is to work with local watershed stewardship groups to identify key sources of pollutants of concern and determine corrective actions. In this case, Regional Board staff work closely with the public and representatives of various interest groups to develop the specific planning approach. The work of these groups is then drafted into a TMDL report that is presented to the Regional Board for adoption. A second approach for developing TMDLs is for Regional Board staff to do the work “in house” and then gather public input through staff workshops or Regional Board hearings. A third approach is for EPA to establish the TMDL independent of State action. In most cases where EPA establishes a TMDL, it is the result of a court-ordered schedule. Regional Board staff assist EPA in developing appropriate information for these TMDLs.

The prioritizing and scheduling of TMDL development initially occurs at the time of listing a water body as impaired under CWA section 303(d). The long-term scheduling of work is done as part of the Watershed Management Initiative planning effort. Additional planning occurs at a more detailed level when developing annual work plans. Separate work plans for TMDLs are currently supported with both federal and State funds. The State and Regional Boards also hold a TMDL roundtable about four times a year. The roundtable serves to orient staff regarding the availability of resources for TMDL work and to discuss approaches to developing various types of TMDLs. EPA staff often participate in these roundtable meetings. Division management receive monthly updates of TMDL activities, and whenever issues of concern are raised, EPA management is included in discussions. In some cases, special assignments may be developed to assist in resolving these issues.

TMDLs are generally adopted by the State and Regional Boards as Basin Plan amendments. Other forms of documentation such as a waste discharge requirement or a memorandum of agreement may also be an appropriate means of validating the TMDL. The Basin Planning process is discussed elsewhere in this report.

4. The process for updating and maintaining water quality management plans including schedules for revision.

Triennial reviews of state-wide and regional (basin) plans are conducted by the State Board for state-wide plans and by regional boards for basin plans. The public is given notice of the triennial review, and a public hearing is held by the State or Regional Board where the Board proposes a list of priority water quality issues to be addressed during the next three

The current process for including a water body on the 303(d) list is described in [Appendix A](#).

More about **Triennial Review** of plans in [Appendix B–page 7](#)

years. After considering input by members of the public and others, the Board adopts a priority list of issues and a workplan detailing the resources that will be allocated and the expected time schedule for completing the actions specified on the priority list. Triennial review results are transmitted by the State Board to US EPA.

Consistent with its triennial review, each Regional Board develops Basin Plan amendments for approval by the State Board, the Office of Administrative Law (OAL), and US EPA. The Basin Plans may also be amended to resolve issues other than those specified in the triennial review, as considered appropriate by the Regional Board. State-wide plans are reviewed and amended as necessary by the State Board.

A complete administrative record of each Plan amendment is maintained, and is eventually archived. The record allows the reviewing agencies and the public to understand the Board's proceedings and decision. It contains the total evidentiary material relied on by the Board in reaching its decision, including all public comments and responses to these, and all publications or other material relied on. The Chief Counsel of the State Board certifies that the amendment is adopted and approved in compliance with all relevant laws and regulations.

In adopting amendments to state-wide plans or basin plans, the state and regional boards comply with Cal/EPA's "Policy and Guiding Principles for External Scientific Peer Review" of March 13, 1998, and with the State Board's internal peer review guidelines (see margin). These guidance documents set out procedures to ensure compliance with Cal. Health and Safety Code Section 57004. Peer review of scientifically-based regulatory measures, such as TMDLs, and staff response to any significant peer review comments, must take place before their adoption as Plan amendments by the State or Regional Board. In the case where a Board is adopting federally promulgated or mandated standards or regulatory measures, peer review is not required since the scientific basis for these has been previously peer reviewed. The statewide coordinator of the boards' external scientific peer review process is located in the Division of Water Quality at the State Board. All requests for external scientific peer review are routed through the peer review coordinator.

5. The process for assuring adequate authority for intergovernmental cooperation in the implementation of State Water Quality Management Programs.

The chief mechanism for assuring cooperation and clear delineation of authority between the State Board and other governmental agencies is that of the interagency agreement, in which the various goals and responsibilities of the agreeing agencies are delineated. These agreements include such instruments as Memoranda of Understanding (MOU), Memoranda of Agreement (MOA), and Management Agency

See also the discussions of **Basin Planning** on [page 7](#), [page 33](#) and [Appendix B](#)

The State Board's Resolutions adopting or approving Plan amendments are on the web at: <http://www.swrcb.ca.gov/resdec/index.html>

(Additional State Board public records, such as staff reports in support of Plan amendments, are being made available on the web as resources permit.)

SWRCB's internal peer review guidance is in a memorandum from Executive Director Walt Pettit: "Guidelines for Obtaining External Scientific Peer Review" August 31, 1998

See a further discussion of scientific peer review requirements on [page 16](#)

Agreements (MAA). (Other, less formal but useful, tools are often used to foster a cooperative relationship, especially at the staff levels, e.g., informal joint program meetings and mutual seminars.) These agreements can be either financial or working agreements. Financial agreements set forth terms and conditions whereby funding may be received, for example, by the State Board from US EPA. Working agreements describe how the two (or more) agencies may work together to address a situation of common interest. In these cases, the roles and responsibilities of each agency are clearly described in the agreement so that each agency's program needs are satisfied without duplication of work. Cooperative agreements also ensure that various aspects of an issue are addressed by the agency best suited to do so. Another important function of cooperative agreements is to provide the agencies with an opportunity to share their philosophies, establish trust, and gain an understanding of each other's jurisdictional responsibilities.

In developing a cooperative agreement, the State Board and the partner agency determine if they will mutually benefit by implementing the cooperative agency approach for some or all of the activities which the latter conducts, controls, or regulates.

The State Board and the partner agency jointly prepare a proposed Water Quality Management Plan (WQMP). This may include participation by other affected stakeholders who will be affected by any Best Management Practices (BMPs) proposed in the Plan. The WQMP/cooperative agreement is then submitted to the water quality planning agency decision-makers.

A public participation process, possibly including public hearings, is then conducted to facilitate full and adequate public understanding of and input on the proposed WQMP/cooperative agreement and to comply with applicable legal requirements. Legal requirements may differ depending on whether compliance with CEQA, NEPA, and/or US EPA requirements is needed. The State Board will then determine whether it can provide any benefits desired by the other agency, whether the proposed WQMP adequately meets the criteria for approval/certification, and whether the proposed management agency has the legal, financial and managerial authority and capability, resources, and expertise needed for effective implementation.

Upon finalization of the WQMP, the State Board will approve/certify the WQMP (including its BMPs), and designate the other agency as the water quality management agency with primary responsibility for WQMP implementation. Finally, the agencies execute the cooperative agreement. If needed, the State or Regional Board will submit these documents and actions to US EPA for approval.

Cooperative agreements can be entered into at various management levels within the agencies involved. The process for developing an agreement involves convening relevant staff and management to discuss

Agencies with which the State Board has Management Agency Agreements include:

Cal. Department of Fish and Game,
Cal. Department of Pesticide Regulation,
Cal. Board of Forestry,
Cal. Department of Forestry and Fire Protection,
US Bureau of Reclamation, and
US EPA.

Examples of activities that might mutually benefit the State Board and its partner agency include those that are:

Controlled by the partner agency on land that it administers, but that are actually performed by a different entity (e.g., USDAFS Timber Sales or Range Allotments);

Funded by the agency, but performed by a different entity (e.g., construction of a stormwater system, recreational facility, or restoration project);

Directly conducted by the agency (e.g., CDF vegetation management program); and

Regulated by the agency on lands belonging to another entity (e.g., CDF forestry regulation, DPR pesticide regulation).

the issue to be addressed, delineating each agency's responsibilities, and deciding the specific details of the agreement such as meeting schedules, reporting progress, and term of the agreement. Cooperative agreements typically also contain provisions for dispute resolution. In most cases, cooperative agreements are signed by the Director or Board Chair of the agencies involved.

6. The process for assuring implementation (including schedules of compliance) for revised or new water quality standards.

Water quality standards are contained in several documents developed by the State and Regional Boards. The State Board has developed several statewide plans, legislatively mandated, that include enforceable water quality standards that apply to specific water bodies. Current statewide plans include the Ocean Plan, the Bay-Delta Plan, and the Thermal Plan. Regional Boards, in partnership with the State Board, develop their Water Quality Control Plans (Basin Plans) that contain water quality standards for each specific region.

The process for developing the statewide plans involves input from both the public and the Regional Boards. First, a series of workshops are held throughout the State to gather public and Regional Board input regarding important issues that need to be addressed. Based on the results of these workshops, a list of issues is developed and ranked according to priority. State Board staff then write a report discussing these priorities and ways to address them. This report is then submitted to the State Board for approval. The issues approved by the board are then further examined, and water quality standards developed.

The process for developing water quality standards that appear in Basin Plans is similar, but is initiated by the need to protect beneficial uses of water as described in the California Water Code. In the case of water quality standards contained in Basin Plans, Regional Board staff will first determine if a EPA standard for a constituent of concern currently exists or if a new standard needs to be developed. If no federal standard exists, staff will develop one. Any new standard is then made available for public review at a Regional Board workshop or other special workshop arranged by the staff. New standards are then subject to the Basin Plan review process (described elsewhere) to become incorporated into the Basin Plan.

Schedules of compliance for both statewide plans and Basin Plans are incorporated into each specific document, and are subject to the review process noted above. Schedules of compliance will vary depending on the document, but all will include monitoring and reporting requirements.

Enforcement of water quality standards is effected through a variety of authorities granted to the State and Regional Water Boards in the Porter-Cologne Water Quality Act. These authorities include issuance of Cease

Additional information can be found in the following SWRCB publications, available on the Web at:

<http://www.swrcb.ca.gov/plnspol>

California Ocean Plan, Functional Equivalent Document
October 1998

California Ocean Plan, Triennial Review Workplan, July 15, 1999

Review of the California Thermal Plan, Initial Staff Report, July 1998

Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary, May 1995

See also:
Revised Water Right Decision 1641, Adopted December 29, 1999, Revised March 15, 2000:
<http://www.waterrights.ca.gov/baydelta/d1641.htm>

See also the discussion on **Statewide Planning** beginning on [page 4](#)

and Desist Orders, Cleanup and Abatement Orders, and through Administrative Civil Liability (Chapter 5). Other regulatory provisions are found in NPDES permits, Waste Discharge Requirements, and regulations for contained discharges.

For a discussion of these **Regulatory Programs**, See [page 10](#)

7. The process for ensuring adequate controls for all residual waste from water treatment processing.

Publicly owned treatment works (POTWs) collect wastewater from homes, commercial buildings and industrial facilities and transport wastewater via collection systems to municipal wastewater treatment plants. These municipal wastewater treatment plants are designed to treat domestic sewage and therefore cannot treat toxic substances, which when discharged by industrial and commercial facilities can cause serious problems. These problems include exposure of treatment plant operators to toxic gases, explosions of flammable substances inside of sewers, municipal wastewater treatment plant upsets, pass through of toxic pollutants into water bodies, and contamination of biosolids. To prevent these problems, the National Pretreatment Program (Program), codified in Title 40 of the Code of Federal Regulations 403, provides the regulatory basis to require commercial and industrial discharges to comply with pretreatment standards (effluent limitations). Under these regulations, local POTWs are required to identify, permit, sample and inspect the significant industrial users that discharge to their collection systems and to enforce the pretreatment requirements. The USEPA has authorized the state to oversee the local pretreatment programs. To do this, the State Board and the nine Regional Boards conduct pretreatment audits and inspections to ensure that the POTWs implement pretreatment programs that are consistent with the federal regulations.

The two primary wastes from water treatment processing are sludge from the settling basins following chemical coagulation or precipitation softening, and wash water from backwashing the filters. These residues contain matter removed from the raw water and chemicals added during processing which can be high in mineral content.

A common disposal alternative is to drain residual slurries into a sanitary sewer. In this situation, the waste is controlled by the provisions of the federal pretreatment program contained in 40 CFR Part 403. The State and Regional Boards schedule inspections and audits of Publicly-Owned Treatment Works to ensure adequate implementation of the federal Pretreatment regulations. This schedule is contained in the annual “Combined Section 106 and Section 104(b)(3) Workplan” negotiated with and provided to EPA.

Another disposal alternative is to dewater sludges by discharging wash water to lagoons or sand drying beds. In these situations, Regional Boards have issued Waste Discharge Requirements to water treatment facilities by authority of the Porter-Cologne Water Quality Control Act

A discussion on **Waste Discharge Requirements** is on [page 12](#)

in order to protect ground water quality. Regional Board staff ensure adequate control by inspecting facilities with Waste Discharge Requirements. Sludges may be mechanically dewatered as well. The resulting dried sludge is then disposed of by landfilling.

8. The process for developing an inventory and ranking in priority order of needs for construction of waste treatment works under Sections 301 and 302.

The State Revolving Fund (SRF) loan program provides funding to help meet water quality management objectives. Loans and other forms of assistance are available through the SRF loan program to construct publicly-owned wastewater treatment and water recycling facilities and to implement nonpoint source, estuary enhancement, and stormwater pollution abatement projects and activities.

To ensure effective use of the available funds to meet enforceable requirements, projects and activities eligible for assistance are prioritized based on the existence of a public health problem, a water quality problem, permit violation, or other need. Information in the Section 303(d) list assists in determining these priorities.

Development of the statewide SRF project priority list is a two-step process. First, each Regional Board adopts a regional priority list or authorizes the Executive Officer to prepare the list. Second, the State Board adopts a statewide SRF project priority list after reviewing the funding available and the Regional Board lists. The statewide list is updated annually and covers a five-year planning period.

The fundable portion (first year) of the list includes projects with a preliminary loan commitment from the State Board and that are scheduled for construction during the first year of the list.

Applicants for SRF loans are responsible for obtaining consistency findings with any applicable plans developed under Sections 205(j), 208, 303(d), 319(h), and 320 of the Clean Water Act before an offer of assistance is made.

Facilities funded by the SRF loan program are designated to meet requirements expressed in Waste Discharge Requirements (WDRs) for that facility. State Board review of facility plans for SRF loan projects includes assessing consistency with WDRs. Consistency with Basin Plans and Areawide Wastewater Management Planning (208 Plans) is the responsibility of the local agency applying for assistance. Inconsistencies are resolved by changing either the facilities plan, the WDR, or the Basin Plan.

See also a description of the SRF on [page 22](#)

Projects and activities on the SRF statewide priority list are assigned to one of the following classes, in descending order of priority:

- Class A – Public health problems;
- Class B – Pollution of impaired water bodies
- Class C – Compliance with requirements and water recycling projects
- Class D – Preventive measures against additional water quality degradation for impaired or unimpaired water bodies
- Class E – Other projects

Projects are ranked in each class by readiness to proceed

9. *The process for determining the priority of permit issuance.*

Pursuant to Section 402 of the Clean Water Act (CWA) and to Section 13370 of the California Water Code (CWC), US EPA approved the State of California's program to issue National Pollutant Discharge Elimination System (NPDES) permits. This is to ensure, to the greatest extent possible, that discharges to surface waters do not adversely affect the quality and beneficial uses of such waters. NPDES permits are required by all dischargers: municipal, industrial, and others, that discharge "pollutants" from any "nonpoint source" into "waters of the United States" [40 CFR Part 122.1].

Permitting activities include any actions necessary to develop and issue an NPDES permit pursuant to 40 CFR Part 123, including all activities necessary to process and review an NPDES application, the preparation of pre-notice draft permits, draft NPDES permits, and Regional Board agenda items, and any inspections, meetings (including travel), or negotiations necessary to gather information and resolve issues relevant to preparation of an NPDES permit.

The State issues NPDES permits in accordance with a Memorandum of Agreement (MOA) between the US EPA and the State Board. Regional Board staff, in issuing NPDES permits, follow the time lines indicated in the MOA for submission of applications, pre-notice draft permits, and other materials relevant to permit development. Neither the State Board nor the Regional Boards may adopt or issue an NPDES permit until all issues raised by US EPA have been resolved pursuant to 40 CFR Part 123 and the MOA.

Any person who proposes to discharge or to make a material change to the character, location, or volume of a discharge of pollutants into surface water must complete, sign, and submit to the Regional Board a complete application for an NPDES permit at least 180 days prior to proposed commencement of a discharge. Any person who is currently discharging pollutants to a surface water without a permit must complete, sign, and submit an application to the Regional Board within 45 days of receiving a written request to do so by the Regional Board, the State Board, or US EPA.

Dischargers who use, manufacture, store, handle, or discharge any toxic or hazardous pollutants in operations ancillary to manufacturing must submit a "Best Management Practices" (BMP) program with their NPDES application. A BMP program is intended to prevent the release of significant amounts of toxic or hazardous pollutants into a water source. A BMP program generally incorporates provisions for management of materials storage areas, in-plant transfer of materials, process and materials handling areas, loading and unloading operations, plant site runoff, and sludge and waste disposal areas.

The **State Board** is responsible for supporting and overseeing the Regional Boards' management of the NPDES Program in California. The responsibility includes:

Evaluating Regional Board performance in the area of permit content and procedure, compliance, monitoring and surveillance, quality assurance of sample analyses, and program enforcement;

Reviewing draft NPDES permits from the standpoint of statewide or regionwide consistency and technical sufficiency and compliance with applicable laws, regulations, and guidance.

Acting on its own motion as necessary to assure that the program is administered in conformance with federal and State legislation, regulations, policy, the MOA, and the annual CWA Section 106 Workplan;

Providing technical assistance to the Regional Boards;

Providing Regional Board staff with new information, regulations, policies, plans, changes, and decisions regarding the NPDES Program as the information becomes available.

Developing and implementing regulations, policy, and guidelines as needed to maintain consistency between State and federal policy and program operations and uniform implementation of the program among the Regions;

Reviewing decisions of the Regional Boards upon petition from aggrieved persons or upon its own motion; and

Assisting the Regional Boards in the implementation of the federal program through the development of policy and procedures.

Regional Water Board staff categorize and classify all dischargers according to their threat to water quality and their complexity. In addition, NPDES dischargers are classified as either major or minor dischargers.

Threat to Water Quality

Category 1 – A violation could render unusable a ground water or surface water resource used as a significant drinking water supply, require closure of an area used for contact recreation, result in long-term deleterious effects on shellfish spawning or growth areas of aquatic resources, or directly expose the public to toxic substances.

Category II – A violation could have a major adverse impact on receiving water biota, cause aesthetic impairment to a significant human population, or render unusable a potential domestic or municipal water supply. Aesthetic impairment would include nuisance from a waste treatment facility.

Category III – A violation of a Regional Board order would cause a relatively minor impairment of beneficial uses compared to Categories I or II above.

Complexity

Category A – Any major NPDES discharger (major) or any non-NPDES discharger (particularly those with toxic wastes) that would be a major discharger if a discharge were made to surface or ground waters or any Class I disposal site. This would include any small-volume complex dischargers (particularly those with toxic wastes) with numerous discharge points, leak detection systems, or ground water monitoring wells.

Category B – Any discharger having a physical, chemical, or biological waste treatment system (except for septic systems with subsurface disposal), any Class II or Class III disposal site, or facilities without treatment systems that are complex, such as marinas with petroleum products, solid wastes, and sewage pump-out facilities.

Category C – Any discharger not included in the categories described above. This would include dischargers having no waste treatment systems, such as cooling water dischargers or those who must comply through BMPs; discharges with passive waste treatment and disposal systems, such as septic systems with subsurface disposal; or dischargers having waste storage systems with land disposal, such as dairy waste ponds.

The **Regional Water Boards** have the following responsibilities for managing the NPDES Program in California:

Regulating all discharges subject to the NPDES Program, except those reserved to U.S. EPA, in conformance with federal and state laws, regulations, and policies;

Adopting or taking other decisive action on NPDES pen-nit applications within 180 days of the date an application is found to be complete, pursuant to California Code of Regulations (CCR), Title 27, Section 10302 (a);

Maintaining technical expertise and management control and following administrative procedures so that implementation of the NPDES Program conforms to State laws, regulations, and policies;

Implementing federal program revisions;

Providing technical assistance to the regulated community to encourage voluntary compliance with program requirements;

Assuring that no one realizes an economic advantage from noncompliance, consistent with Regional Board authority; and

Maintaining an adequate public file at the appropriate Regional Board office for each permittee. Such files, at a minimum, must include copies of the pen-nit application, permit, public notice, Fact Sheet and/or Statements of Basis, discharge monitoring reports, inspection reports, enforcement actions, and other pertinent information and correspondence.

NPDES Major/Minor Classification

POTWs with design flows equal to or greater than one million gallons-per-day (MGD) and those with design flows less than one MGD but with actual or potential adverse environmental impacts are classified as major dischargers. Regional boards are responsible for submitting completed worksheets for potential industrial major dischargers to US EPA, which alone has final authority to designate major dischargers. Regional boards shall notify US EPA in writing of all municipal major discharger designations.

All significant activities conducted in the development of an NPDES permit are documented and placed in the discharger file. When developing the draft permit, the application, all formal notes, calculations, meeting reports, and literature references are entered into the file. The name of the writer and the date shall be included on all materials. The file is a public record and will be maintained in a neat, orderly, complete, and retrievable format in such a manner that the permit development history can be reconstructed.

Permit effluent limitations must be set to attain or maintain the water quality that assures protection of all beneficial uses. All permit requirements shall comply with the effluent limitations adopted under CWA Sections 301, 302, 306, 307, and 405, and when applicable, any more stringent limitations necessary to meet water quality standards or prohibitions.

All permit requirements must also comply with any water quality control plans (Basin Plans) established under Division 7 of the California Water Code, any plan approved pursuant to CWA Section 208(b), or any effluent limitation designed to achieve the requirements of Section 301(b) of the Act.

Prior to promulgation by the US EPA Regional Administrator of applicable effluent standards and limitations pursuant to Sections 301, 302, 306, 307, and 405, NPDES permits must contain effluent limits and other conditions necessary to carry out the provisions of Clean Water Act. If a toxic effluent standard is established pursuant to CWA Section 307 for a toxic pollutant which is present in a discharge, and such standard is more stringent than the current NPDES permit requirements, the permit shall be reviewed in accordance with such toxic effluent standard.

Some permits for discharges to water bodies that do not meet water quality objectives may require effluent limitations for parameters which are more stringent than those developed pursuant to CWA Sections 301, 302, 306, 307, and 405. In such instances, a waste load allocation must be prepared or other calculations used to ensure that the authorized discharge will not violate applicable water quality standards.

NPDES permits will not be issued if any of the following occur:

The discharge contains a radiological, chemical, or biological warfare agent or high-level radioactive waste.

The Secretary of the Army, acting through the Chief of Engineers, finds the discharge would substantially impair anchorage and navigation.

The US EPA Regional Administrator has objected to its issuance in writing.

The discharge is in conflict with an approved plan pursuant to Section 208(b) of the Federal Water Pollution Control Act.

An appropriate monitoring program and a reporting program must be included in all permits. The monitoring program may require the discharger to use adequate monitoring equipment or methods at the discharger's expense, including biological monitoring methods. The specific location of monitoring stations are established and serial numbers shall be assigned to multiple sampling stations, and each effluent flow or pollutant is monitored at intervals sufficiently frequent to yield data which reasonably characterize the nature of the discharge. The frequency of monitoring events must be adequate enough to determine compliance with constituent limitations, but in no event less than once per year. Variable effluent flows and constituent levels are monitored at more frequent intervals. All parameters limited in the permit are monitored, and monitoring frequency for a specific parameter is determined by the Regional Board.

Final approval of all NPDES permits are subject to the public hearing process conducted by the State and Regional Boards. This consists of public notice, comment period, public hearing, and final adoption.

See also the discussion of **NPDES Permits** on [page 10](#)

APPENDIX A

1998 CLEAN WATER ACT (CWA) SECTION 303(d) LISTING GUIDELINES FOR CALIFORNIA (August 11, 1997)

A. Introduction

The Total Maximum Daily Load (TMDL) Workgroup¹ identified the need to develop statewide consistency on 303(d) listing issues. At its roundtable meeting on April 30, 1997, the workgroup decided to develop 303(d) listing guidelines that would be acceptable to the Regional Water Quality Control Boards (RWQCB), State Water Resources Control Board (SWRCB), and U.S. Environmental Protection Agency (U.S. EPA). Three work teams were formed to address various 303(d) listing issues. Each team met several times to develop a draft work team product. The work team products were circulated for comment from the TMDL workgroup and the drafts were revised by the work teams. The TMDL workgroup held a second roundtable meeting on July 28, 1997 to review the integrated product of the three work teams, and revisions to the listing guidelines were made (a list of attendees at the TMDL roundtable meetings and work team members is attached).

The guidelines address the following topics: listing/ delisting factors, scheduling and prioritization, public notice procedures, the 303(d) list submittal package, and coordination with the Watershed Management Initiative (WMI).

B. Listing Factors

The following factors were developed to provide for consistent statewide decisions on listing California surface water bodies under CWA Section 303(d). However, they are meant to be flexible, and the RWQCBs should exercise judgment based on the specific circumstances for each water body. The listing factors will be reviewed periodically and may be revised to reflect new scientific information or newly developed water quality criteria (e.g., sediment criteria, criteria for evaluation of wetland functions). Information sources which should be considered include sources listed in 40 CFR 130.7(b)(5) and sources found in Appendix D of the 1996 305(b) Guidance from U.S. EPA.

Water bodies may be listed if any one of these factors is met²:

1. Effluent limitations or other pollution control requirements [e.g., Best Management Practices (BMPs)] are not stringent enough to assure protection of beneficial uses and attainment of SWRCB and RWQCB objectives, including those implementing SWRCB Resolution Number 68-16 "Statement of Policy with Respect to Maintaining High Quality of Waters in California" [see also 40 CFR 130.7(b)(1)].

¹ An ad hoc workgroup of staff from the Regional Water Quality Control Boards, State Water Resources Control Board, and U.S. EPA that have an interest in 303(d) issues.

² U. S. EPA's national policy is that water bodies impaired by natural conditions should be listed. In light of this policy, the RWQCBs should consider designating such water bodies as a low priority for establishing TMDLs.

2. Fishing, drinking water, or swimming advisory currently in effect. This does not apply to advisories related to discharge in violation of existing WDR's or NPDES permit.
3. Beneficial uses are impaired or are expected to be impaired within the listing cycle (i.e. in next two years). Impairment is based upon evaluation of chemical, physical, or biological integrity. Impairment will be determined by "qualitative assessment"³, physical/ chemical monitoring, bioassay tests, and/or other biological monitoring. Applicable Federal criteria and RWQCB Water Quality Control Plans determine the basis for impairment status.
4. The water body is on the previous 303(d) list and either: (a) "monitored assessment"⁴ continues to demonstrate a violation of objective(s) or (b) "monitored assessment" has not been performed.
5. Data indicate tissue concentrations in consumable body parts of fish or shellfish exceed applicable tissue criteria or guidelines. Such criteria or guidelines may include SWRCB Maximum Tissue Residue Level values, FDA Action Levels, NAS Guidelines, and U.S. EPA tissue criteria for the protection of wildlife as they become available.
6. The water quality is of such concern that the RWQCB determines the water body needs to be afforded a level of protection offered by a 303(d) listing.

C. Delisting Factors

Water bodies may be delisted for specific pollutants or stressors if any one of these factors is met:

1. Objectives are revised (for example, Site Specific Objectives), and the exceedence is thereby eliminated.
2. A beneficial use is de-designated after U.S. EPA approval of a Use Attainability Analysis, and the non-support issue is thereby eliminated.
3. Faulty data led to the initial listing. Faulty data include, but are not limited to, typographical errors, improper quality assurance/quality control (QA/QC) procedures, or Toxic Substances Monitoring/State Mussel Watch EDLs which are not confirmed by risk assessment for human consumption.

³ Qualitative Assessment: An assessment based upon information other than ambient monitoring data. Information used may include land use data, water quality impacts, predictive modeling using estimated input variables, or fish and game biologist surveys. A sole reliance on professional judgment, literature statements (often judgment based), or public comments should not be the only basis for listing.

⁴ Monitored Assessment: For aquatic life uses, monitored assessment should be based upon a minimum of Level 2 information, as indicated in the 1996 305(b) guidance [Guidelines for Preparation of the 1996 State Water Quality Assessments ("305(b) Reports"), EPA 841 B-95-001, May 1995; Pages 5-6 through 5-10, Tables 5-2 & 5-3]. There is a need to develop guidance for Minimum Data Requirements for assessing other beneficial uses.

4. It has been documented that the objectives are being met and beneficial uses are not impaired based upon “Monitored Assessment” criteria.
5. A TMDL has been approved by the U.S. EPA.
6. There are control measures in place which will result in protection of beneficial uses. Control measures include permits, clean up and abatement orders, and watershed management plans which are enforceable and include a time schedule.

D. Priority Ranking, Targeting, and Scheduling

Priority Ranking

A priority ranking should be provided for listed waters to guide TMDL planning pursuant to 40 CFR 130.7. RWQCBs should apply the following criteria in ranking TMDLs in high (H), medium (M), and low (L) priority categories:

- water body significance (such as importance and extent of beneficial uses, threatened and endangered species concerns and size of water body)
- degree of impairment or threat (such as number of pollutants/stressors of concern, and number of beneficial uses impaired or threatened)
- conformity with related activities in the watershed (such as existence of watershed assessment, planning, pollution control, and remediation, or restoration efforts in the area)
- potential for beneficial use protection or recovery
- degree of public concern
- available information

All water bodies should be ranked in one of the three categories (H, M and L) . Not all high priority waters need to be targeted in the next two years for TMDLs.

Scheduling and Targeting

Schedules for starting, completing and submitting TMDLs should be provided for all listed waters/pollutants pursuant to 40 CFR 130.7(d)(1). The schedules should provide for submittal of all TMDLs for all listed waters/pollutants on the 1998 list. Given the difficulty of estimating TMDL development time frames, RWQCBs should make best estimates based on TMDL resource planning efforts being conducted pursuant to the WMI process. The schedules should be presented in three levels to reflect degree of certainty regarding the attainability of the schedules.

Level 1: Next Two Years: Some waters should be targeted for TMDL development over the next two years pursuant to 40 CFR 130.7. Waters should be targeted in cases where substantial work on TMDL development is expected during the next two years, even if the TMDL is not scheduled for completion until after the next two years. The schedules for targeted waters should be consistent with the RWQCB’s WMI planning chapter. The rationale for targeting a particular set of waters should be documented.

Level 2: Five Year Time Frame: RWQCBs should provide schedules for TMDLs to be initiated over the next five years, resource needs for which should be reflected in the RWQCB's WMI planning chapter (see section G) and addressed in WMI resource allocation decision-making. Schedules should be based on those TMDL activities for which RWQCBs are actively seeking funding support and should include TMDLs for which funding is reasonably likely to become available through other state, federal, or third party (e.g., discharger) sources.

Level 3: Years 5-13: RWQCBs should provide tentative schedules for completing TMDLs for the remaining waters over a period not to exceed 13 years. Schedules should be based on those TMDL activities for which RWQCBs are planning to seek funding support, with appropriate caveats stating that these provisional schedules are dependent on resource availability and further evaluation of TMDL applicability and feasibility.

E. Public Notice Procedures

At a minimum, each RWQCB shall conduct the following public participation activities:

1. Provide a 30-day comment period with public notice of the proposed 303(d) list. The RWQCB should consider the following options to fulfill the public notice requirements:

Option A. RWQCB workshop and adoption of the draft 303(d) list at a public hearing

The RWQCB may conduct a workshop to consider the draft 303(d) list followed by a public hearing to adopt the 303(d) list. A 30-day public notice shall be provided for the workshop and 45-day public notice shall be provided for the public hearing. Written comments should be submitted 15 days prior to the public hearing.

Option B. RWQCB adoption of the draft 303(d) list at a regular Board meeting

The RWQCB may adopt the 303(d) list at a regular Board meeting. A 30-day public notice of the RWQCB's intent to consider adoption of the draft 303(d) list, TMDL priority ranking and scheduling should be provided. The public notice shall solicit written comments on the draft 303(d) list. Written comments should be submitted 7 days prior to the RWQCB meeting.

Option C. RWQCB adoption of the draft 303(d) list at a public hearing (no workshop)

The RWQCB may adopt the 303(d) list at a duly noticed public hearing (45-day public notice). The public notice shall solicit written comments on the draft 303(d) list. Written comments should be submitted 15 days prior to the RWQCB meeting.

2. Prepare a responsiveness summary (40 CFR part 25) responding to all written comments on the draft 303(d) list received by the cut-off date.

The RWQCB should consider the following:

Provide 90-day public notice of RWQCB's intent to consider revisions to 303(d) list, establish TMDL priority ranking and development schedule. This notice should outline the criteria used for listing decisions and which watersheds will be assessed in this listing cycle. The notice shall solicit

information, data, and other relevant factors to assist RWQCB staff in the preparation of the draft 303(d) list and TMDL priority ranking/schedule.

F. 303(d) List Submittal Package

At a minimum, each RWQCB should submit to the SWRCB the following information with the 303(d) list submittal:

1. 303(d) list of water bodies (referenced on maps, if feasible), pollutant or stressors, pollutant sources, extent of impairment (e.g. miles of stream, acres of estuary), TMDL priority ranking and schedule for TMDL development for all listed water bodies by the RWQCB; and
2. list of water bodies and associated watersheds (referenced on maps, if feasible) which were assessed in the current cycle; and
3. factors used to list or delist specific waterbodies (see sections **B** and **C**). Criteria used to prioritize TMDL development (see section **D.1.**). Criteria used to generate TMDL development schedules (see section **D.2.**); and
4. documentation for TMDL priority ranking and scheduling decisions, which may include an estimate of resource needs for high priority water bodies for TMDL development; and
5. documentation of the public participation process
 - a. public notice(s)
 - b. responsiveness summary; and
6. list of RWQCB file(s) which contain the individual water body assessment data, information, etc. upon which the listing decision was made (note: a RWQCB may choose to submit the data assessment information in lieu of the minimum list of files to the SWRCB as part of the submittal package. This may be warranted for some water bodies where there is significant controversy).

G. Coordination with the Watershed Management Initiative (WMI)

RWQCBs should conduct the 303(d) assessment consistent with each region's schedule outlined in the WMI chapter for updating the Water Quality Assessment (WQA). The WQA includes the 303(d) listing. The TMDL priority ranking and scheduling shall also be consistent with the WMI chapter. In order to assure this consistency, each RWQCB should:

1. include the 303(d) listing/review schedule for each watershed in the regions' WMI chapter; and
2. include the TMDL priority ranking and scheduling in the regions' WMI chapter; and
3. include resource allocation projections for conducting the 303(d) listing assessment in the regions' WMI chapter.
4. in cases where the RWQCB focused the 303(d) listing/review on a subset of watersheds in the region, public comments on water bodies outside of targeted watersheds will be directed to the WMI process for prioritization.

APPENDIX B

OUTLINE OF CALIFORNIA WATER QUALITY CONTROL PLANNING

I. AUTHORITY FOR WATER QUALITY PLANNING

A. STATE REQUIREMENTS

The Porter-Cologne Water Quality Control Act:

1. Identifies the State Water Resources Control Board (State Board/SWRCB/board) and the nine California Regional Water Quality Control Boards (regional boards/board) as the principal State agencies with regulatory responsibility for coordination and control of water quality. [California Water Code (CWC) §13001]
2. Requires the State Board to adopt and revise State policy for water quality control. [CWC §13140]
3. Authorizes the State Board to adopt statewide water quality control plans (statewide Plans) for waters for which water quality standards are required by federal law. Such plans supersede regional water quality control plans (basin plans) to the extent of any conflict that may arise. [CWC §13170]
4. Requires the regional boards, after consultation with affected state and local agencies, and following a public hearing, to develop and adopt basin plans which address all areas in the region and conform to State water quality policy. [CWC §13240]
5. Defines water quality control plans as consisting of the designation or establishment of (1) beneficial uses to be protected, (2) water quality objectives, and (3) a program of implementation needed for achieving water quality objectives for the waters within a specified area. [CWC §13050(j)]
6. Requires that a basin plan or basin plan amendment adopted by a regional board be approved by the State Board [CWC §13245]. Further, the Administrative Procedures Act, Government Code §11340 et seq. requires approval by the Office of Administrative Law (OAL) of regulatory portions of any basin plan or statewide plan or their amendments. For amendments affecting water quality standards for surface waters, the federal Clean Water Act requires approval by the US Environmental Protection Agency (US EPA) [CWA) §303(c)(3)]. The effective date of a plan or amendment is the date of approval by the final approving agency.
7. Requires basin plans to be periodically reviewed [CWC §13240], and requires that the California Ocean Plan be reviewed at least every three years [CWC §13170.2].

B. FEDERAL REQUIREMENTS

The federal Clean Water Act (CWA):

1. Requires states to adopt water quality standards for surface waters. [CWA §303]
A water quality standard consists of designated beneficial uses and numeric or narrative criteria to protect those uses. Additionally, the US EPA considers an antidegradation policy to be part of a water quality standard.
2. Requires that at least once every three years, states hold public hearings for the purpose of reviewing water quality standards and modifying or adopting additional standards, as appropriate, i.e., a triennial review. [CWA §303(c)(1)]
3. Requires states to adopt numeric criteria (water quality objectives) for toxic substances. [CWA §303(c)(2)(B)]

Federal regulations implementing these sections of the Clean Water Act are in Title 40 of the Code of Federal Regulations (CFR), primarily section 130 (water quality standards) and section 131 (planning and management). The “California Toxics Rule”, adopted by US EPA as a federal regulation in April, 2000, sets numeric water quality criteria for California for a number of toxic substances. [40CFR 131.38]

A. II. WATER QUALITY CONTROL PLANS

California currently has three Statewide (or multi-regional) and ten regional Water Quality Control Plans. Statewide and regional Plans are available at the State Board’s web site:

<http://www.swrcb.ca.gov/plnspols/index.html>

or at the University of California’s “e-library” site:

http://elib.cs.berkeley.edu:80/cgi/doc_query?orderby=author&where-doc_type=basinplan

Statewide Plans are adopted and amended by the State Board. These include:

- ❑ The California Ocean Plan,
- ❑ The Thermal Plan (“Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California”), and
- ❑ The Bay-Delta Plan (“Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary”).

Regional Plans (basin plans) are adopted and amended by the regional boards. Each of the nine regional boards has one basin plan covering the entire region, except that the Central Valley Regional Board administers two basin plans to cover the Central Valley.

Both basin plans and statewide plans must:

- A. **Conform** to the policies given in Division 7, Chapter 1 of the Water Code [CWC §13000], and any state policy for water quality control [CWC §13170, §13240]. Statewide Policies, adopted by the State Board, address water quality concerns for surface and groundwaters that overlap

regional board boundaries, are statewide in scope, or are otherwise considered significant. These policies are available on the Internet at: <http://www.swrcb.ca.gov/plnspols/index.html>

Current Statewide Policies include:

- ◆ Policy for Water Quality Control (adopted July 6, 1972),
- ◆ Statement of Policy with Respect to Maintaining High Quality of Waters in California (“Antidegradation” policy – SWRCB Resolution No. 68-16),
- ◆ Water Quality Control Policy for the Enclosed Bays and Estuaries of California (SWRCB Res. 74-43),
- ◆ Water Quality Control Policy on the Use and Disposal of Inland Waters Used for Powerplant Cooling (SWRCB Res. 75-58),
- ◆ Policy with Respect to Water Reclamation in California (SWRCB Res. 77-1),
- ◆ Policy on Disposal of Shredder Waste (SWRCB Res. 87-22),
- ◆ Policy Regarding the Underground Storage Tank Pilot Program (SWRCB Res. 88-23),
- ◆ Sources of Drinking Water Policy (SWRCB Res. 88-63),
- ◆ Pollutant Policy Document for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (SWRCB Res. 90-67),
- ◆ Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code §13304 (“Containment zone” policy – SWRCB Res. 92-49),
- ◆ Policy for Regulation of Discharges of Municipal Solid Waste (SWRCB Res. 93-62),
- ◆ Water Quality Enforcement Policy (SWRCB Res. 96-030 & 97-085),
- ◆ Consolidated Toxic Hot Spots Cleanup Plan (Adopted as a water quality control policy) (SWRCB Res. 99-065),
- ◆ Water Quality Control Policy for Guidance on Development of Regional Toxic Hot Spot Cleanup Plans (SWRCB Res. 98-090), and
- ◆ Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (“CTR” policy – SWRCB Res. 2000-15).

B. ***Identify existing and potential beneficial uses*** of the surface and groundwaters of the state [CWC §§13050(f), (j)]. Under the California Water Code, designation of beneficial uses is an integral part of both basin plans and statewide plans. The CWC defines beneficial uses of water as: domestic, municipal, agricultural, and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. The Clean Water Act [CWA §303] also requires that the State designate beneficial uses for surface waters for protection and propagation of fish, shellfish and wildlife, recreation in and on the water (“fishable/swimmable” goals, CWA §101), use of water for public water supplies, and agricultural, industrial, and navigational purposes [CWA §303]. Beneficial uses must be designated for all waters of the State, i.e., any water, surface or underground, within the boundaries, including seaward boundaries, of the State.

The standardized list of beneficial uses to be protected is shown in Attachment 1 to this Appendix. While this list is comprehensive, it may not include every conceivable use. A board may adopt additional beneficial use definitions through a plan amendment. Additional beneficial uses for a water body can be designated through a plan amendment. Beneficial use designations may be removed under certain circumstances. The following summarizes the conditions under which beneficial use designations may be changed by a regional board:

Adding A Designated Beneficial Use To A Surface Water:

The board must demonstrate that the use exists or has the potential to occur in the water body. Depending on the designation, scientific peer review may be required.

Adding A New Beneficial Use Definition:

The board must demonstrate the necessity for a new beneficial use definition, i.e., explain the new use of water and why it needs to be defined.

Removing A Designated Beneficial Use From A Surface Water:

Federal regulations prohibit de-designation of beneficial uses that exist in a water body [40 CFR 131.10]. However, federal regulations do allow removal of a designated use that is not an existing use (i.e., it is a potential use, or a use designated as existing but never attained). In this case, the board must demonstrate that the use cannot be attained due to:

1. Naturally occurring pollutant concentrations; or
2. Naturally intermittent or low flow conditions (unless these conditions may be compensated for by a sufficient volume of effluent discharge without violating water conservation requirements); or
3. Human-caused conditions or sources of pollution that cannot be remedied or would cause more environmental damage to correct than to leave in place; or
4. Dams, diversions, or other types of hydrologic modifications that preclude attainment, and it is not feasible to restore the water body to its original condition or operate the modification in a way that would result in attainment of the use; or
5. Natural physical features or conditions of the water body, unrelated to water quality, that preclude aquatic life protection; or
6. Widespread economic and social impacts that would result from requiring controls more stringent than those required by CWA §301(b) and §306.

If the board proposes to remove human water contact or aquatic habitat beneficial uses (i.e., non-attainment of the Clean Water Act “fishable/swimmable” goals), or to designate uses that do not include the fishable/swimmable uses, the proposed action must be supported by a use attainability analysis (UAA). A UAA is defined in the federal regulations [40 CFR 131.3(g)] as a structured scientific analysis of the physical, chemical, biological, and economic factors affecting the attainment of the use.

To remove a non-“fishable/swimmable” use the Board must demonstrate that attainment of the use is not feasible for one of the reasons cited above. A formal use attainability analysis is not required [40 CFR 131.10].

Removing The Designated Beneficial Use MUN – Municipal and Domestic Supply:

In accordance with State Board Resolution 88-63, the “Sources of Drinking Water Policy”, all basin plans indicate that all surface and groundwaters of the State are considered to be suitable, or potentially suitable, for municipal or domestic water supply (“MUN”), with

certain specified exceptions. However, some waters, primarily groundwaters, were designated MUN by default, i.e., without first determining if the water body met one of the exception criteria of State Board Resolution 88-63. In order to remove an inappropriate MUN designation from a groundwater basin (or aquifer) the board must clearly demonstrate that the groundwater basin meets one of the exception criteria. To remove an inappropriate designation from surface water, the board must clearly demonstrate that the water body meets one of the exception criteria, **and** that one of the six factors listed above, in “*Removing A Designated Beneficial Use From A Surface Water*”, applies. These demonstrations must be supported by substantial evidence in the record.

C. ***Establish water quality objectives*** to protect the beneficial uses of the waters of the state [CWC §§13050(h), (j); §13241]. A water quality objective is the limit or level of a constituent or characteristic that is established for the reasonable protection of beneficial uses of the water or the prevention of a nuisance in a specific area [CWC §13050(h)]. Water quality objectives are generally established as maximum levels or concentrations of a pollutant, but may be set as a minimum level for certain water quality parameters such as dissolved oxygen, or as a range for other parameters such as pH. Objectives to protect the designated beneficial uses must be based on sound (and peer reviewed) scientific rationale. The Water Code §13241 specifies that six factors must be considered whenever water quality objectives are established:

1. Past, present, and probable future beneficial uses of water;
2. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available;
3. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area;
4. Economic considerations;
5. The need for developing housing within the region; and
6. The need to develop and use recycled water. See “Policy with Respect to Water Reclamation in California” (SWRCB Res. 77-1), and “Policy Statement on Wastewater Discharge to Watercourses in Water Deficient Areas” (SWRCB Res. 79-45).

Federal regulations [40 CFR 131.11] require that water quality criteria be based on sound scientific rationale and contain sufficient parameters or constituents to protect the most sensitive beneficial use.

When removing a water quality objective, the board must clearly demonstrate non-degradation, and the continued protection of existing and potential beneficial uses.

Water quality objectives can be either numeric values based upon Clean Water Act guidance [CWA §304(a)] or other scientifically defensible methods, or narrative descriptions. Water quality objectives for US EPA’s “Priority Pollutants” must be numeric. Federal regulations state that criteria (water quality objectives) must protect the most sensitive beneficial uses [40 CFR 131.11(a)].

- D. ***Contain implementation programs*** to achieve these objectives including a description of the nature of actions necessary to achieve the objectives, a time schedule for the actions to be taken, and the surveillance and monitoring activities to determine compliance with the objectives [CWC §13050(j); §13244].

Under the Water Code [CWC §13242], the program of implementation for achieving water quality objectives shall include, but is not limited to, the following three components:

1. **A description of the nature of actions** which are necessary to achieve the objectives, including recommendations for appropriate action by any public or private entity. These programs and actions may include, but are not limited to, the following:
 - a. Issuance of Waste Discharge Requirements (WDR), which also serve as National Pollutant Discharge Elimination System (NPDES) permits for discharges from point sources to navigable waters, including stormwater runoff permitting;
 - b. Issuance of WDRs for discharges to groundwater and to earthen containment intended to preclude discharges reaching groundwater (e.g., landfills, ponds, land application of treated wastewater, sludge disposal, etc.);
 - c. Issuance of WDRs for discharges of irrigated agriculture return flows,
 - d. Identification of background water quality;
 - e. Establishment of water quality based effluent limitations;
 - f. Prohibitions of discharge and, if applicable, the criteria under which exceptions to the prohibitions may be granted;
 - g. Nonpoint source control programs including applicability and procedures for approval/acceptance of management practices;
 - h. Establishment of Total Maximum Daily Loads (TMDL);
 - i. Enforcement considerations;
 - j. Policy and procedures for addressing specified types of discharges, including agricultural runoff, erosion control, and vessel waste;
 - k. Policy and procedures for determining compliance with effluent limits and water quality objectives;
 - l. Policy and procedures for addressing specified programs, including wastewater reclamation, re-use and land disposal;
 - m. Waiver policy and listing of types of waivers granted;
 - n. State Board-adopted Policies and Guidelines; and
 - o. Listing, and brief description, of cooperative agreements with other agencies for water quality control, such as Memoranda Of Understanding and Management Agency Agreements.
2. **A time schedule** for actions to be taken; and
3. **A description of surveillance and monitoring** to be undertaken to determine compliance with water quality objectives [CWC §13242]. This includes, but is not limited to, a description of the following:
 - a. Types of monitoring required under WDRs and NPDES permits;

- b. Regional/watershed based monitoring;
- c. Regional board compliance monitoring / inspections; and
- d. Special projects

When possible, implementation programs should be tailored to the individual region's or sub-basin's hydrologic conditions and controllable factors. Considerations in tailoring an implementation plan may involve assumptions based on projections such as population growth, over which the regional board exercises little or no effective control.

Federal regulations [40 CFR 131.13] require that state policies that implement water quality standards (e.g., policies for mixing zones, low flow, etc.) must be approved by US EPA.

Specific implementation programs:

Adding Or Modifying A Total Maximum Daily Load (TMDL):

In addition to the aspects of a TMDL required by the US EPA, TMDL basin plan amendments must include an implementation plan. If a TMDL is being adopted without sufficient information to develop a complete implementation plan, a "phased" implementation plan may be considered. A phased implementation plan may adopt initial stages of an implementation plan, such as a study program, or may contain a commitment by the regional board to reconsider the implementation plan by a specified time.

Adding a Prohibition of Discharge:

Prohibitions of discharge may be established for a water body, for a pollutant, or for specified conditions. The prohibition may be for all waste discharges or for certain types of waste discharges [CWC §13243]. A prohibition of discharge for septic systems must be supported by substantial evidence in accordance with CWC §13280. In addition, the board must consider specified evidence, including, for example, failure rates of any existing systems [CWC §13281]. Some examples of prohibitions of discharge are: No discharge to Lake Tahoe; no discharge to the Russian River by the City of Santa Rosa under low flow conditions; and generally, prohibitions on discharge of toxic substances in toxic amounts to any water body. There are additional public notification requirements when adopting a prohibition [CWC §13244].

E. *Be updated* ("Triennial Review")

State law requires that state policy for water quality control and water quality control plans be reviewed periodically [CWC §13143, §13240]. State law specifies that the Ocean Plan must be reviewed at least every three years [CWC §13170.2]. Federal law [CWA §303(c)(1)] requires that a state's water quality standards be reviewed every three years. These reviews are formal State or regional board actions requiring a resolution adopting the triennial review.

Triennial reviews are comprehensive and include a public hearing to identify issues to be addressed including, but not limited to, the appropriateness of the water quality standards. The review identifies standards that need to be revised, and affirms those standards that are appropriate and require no revision. Information on continuing or new water quality problems,

impairment of beneficial uses, or violation of water quality objectives may come from monitoring data, compliance inspections, discharger reports, and public suggestions. Changes in State or federal laws and regulations may also dictate the need for a Plan amendment. The State or regional board evaluates all available information and determines whether revisions to water quality standards or implementation plan are needed and the nature of any necessary revisions.

ADDITIONAL IMPORTANT INFORMATION

A. FUNCTIONAL EQUIVALENCE

The California Environmental Quality Act (CEQA) authorizes the Secretary for Resources to certify specific regulatory programs of State agencies as being “functionally equivalent” to the requirements of CEQA for preparation of environmental documentation, such as “Initial Study” and “Environmental Impact Report”. All basin plans, statewide plans and plan amendments are subject to CEQA; however the State Board’s water quality planning process has been certified by the Secretary for Resources as “functionally equivalent to,” and therefore exempt from, CEQA's requirement for preparation of an environmental impact report or negative declaration and initial study [California Code of Regulations (CCR) Title 14, §15251(g)]. State Board regulations [23 CCR 3720 et seq.] for Implementation of the Environmental Quality Act of 1970 describe the environmental documents required for planning actions. These documents are: a written report, an initial draft of the amendment, and an Environmental Checklist Form [23 CCR 3776].

B. ECONOMICS

- *Requirements of CEQA*

CEQA requires that whenever a State or regional board adopts rules that require the installation of pollution control equipment or establish a performance standard or treatment requirement, the board must conduct an environmental analysis of the reasonably foreseeable methods of compliance [Pub. Res. Code §21159, 14 CCR 15064]. This analysis must take into account a reasonable range of factors, including economics. TMDLs will typically include performance standards, i.e., quantifiable targets together with allocations, and will therefore require consideration of costs of the identified methods of compliance.

- *Requirements of the Water Code*

CWC §13141 requires that “prior to implementation of any agricultural water quality control program, an estimate of the total cost of such a program, together with an identification of potential sources of financing, shall be indicated in any regional water quality control plan.”

CWC §13241 requires that the Boards consider economics when they adopt water quality objectives. The economic assessment generally will, at a minimum, require a review of available information to determine whether:

- o the proposed water quality objective is currently being attained; or if not,
- o what methods are available to achieve compliance with the water quality objective and the costs of those methods of compliance.

If the potential economic impact of adopting the proposed water quality objective appear significant, then the staff report must clearly state why adoption of the objective is necessary to assure the reasonable protection of beneficial uses of state waters, despite the potential adverse economic consequences.

- Requirements of the federal Clean Water Act

The federal Clean Water Act and its implementing regulations do not require consideration of economics when setting water quality criteria. It is required that the criteria be protective of the designated (existing or potential) beneficial uses. According to the US EPA, economics should be addressed during the designation of potential beneficial uses [40 CFR 131.10(d)] and de-designation of potential beneficial uses [40 CFR 131.10(g)(6)]. Federal public participation regulations require, whenever possible, that social, economic and environmental consequences shall be clearly stated in informational material [40 CFR 25.4]

C. ANTIDEGRADATION

1. State Requirements.

Modification of beneficial use designations and relaxation of water quality objectives must conform to State Board Resolution 68-16, “Statement of Policy with Respect to Maintaining High Quality of Waters in California.” State Board Resolution 68-16 applies to all waters of the State, both surface and groundwaters, and states that existing high water quality will be maintained until it has been demonstrated that any change:

- ◇ will be consistent with maximum benefits to the people of the State,
- ◇ will not unreasonably affect present and anticipated beneficial use of such water, and
- ◇ will not result in water quality lower than that prescribed in the policies (includes statewide and basin plans).

2. Federal Requirements.

The federal regulations covering antidegradation [40 CFR 131.12] must be addressed whenever it is proposed to relax a standard (beneficial use or water quality objective) for surface water. These regulations divide waters into three types or tiers:

- ◆ **Tier 1:** Waters that either do not meet the federal “fishable/swimmable” goals, or that meet “fishable/swimmable” goals but lack assimilative capacity to accept any more of the specific pollutant proposed for discharge. In these waters, existing uses and the level of water quality necessary to protect the existing uses shall be maintained and

protected. This tier effectively prohibits further degradation where beneficial uses are not already fully protected.

- ◆ **Tier 2:** Waters where the water quality is better than the minimum necessary to maintain “fishable/swimmable” [CWA §101(a)] uses. Water quality at this level may be lowered to a level that will still protect the most sensitive beneficial use, if it can be demonstrated that the reduction is necessary to accommodate important social or economic development. (Note: US EPA has given guidance on “important social and economic development” in the references listed below.)
- ◆ **Tier 3:** Outstanding national resource waters such as waters in National and State parks and wildlife refuges, or waters of exceptional recreational or ecological significance. Any reduction in water quality is prohibited.

Water quality may be lowered for Tier 2 waters by relaxing applicable water quality objectives or de-designating potential (but not existing) beneficial uses. This may be done only after satisfying public participation requirements, and if the Board finds that (1) the relaxation of the standard is necessary to accommodate important economic or social development in the area in which the waters are located; and (2) the revised beneficial use or water quality objective will assure water quality adequate to fully protect existing beneficial uses; and (3) the highest statutory and regulatory requirements will be imposed on all new and existing point sources and all cost-effective and reasonable best management practices will be required for nonpoint source control. The following documents further describe the federal antidegradation policy:

- “Water Quality Standards Handbook: 2nd Edition, Update #1, US EPA, August 1994.
- "Guidance on Implementing the Antidegradation Provisions of 40 CFR 131.12", EPA Region 9, June 3, 1987.
- "Questions and Answers on Antidegradation, US EPA" (Appendix A to Chapter 2 of the Water Quality Standards Handbook), December 1983. See also: <http://www.epa.gov/epahome/publications.htm>

As of September 2000, US EPA has issued draft revisions to the antidegradation regulations.

D. EXTERNAL SCIENTIFIC PEER REVIEW

Requirements:

- The scientific basis of any statewide plan, basin plan, plan amendment, guideline, policy, or regulation must undergo external peer review before adoption by the State or regional board [Health and Safety Code, §57004]. The “scientific basis” and “scientific portions” are those “foundations of a rule that are premised upon, or derived from, empirical data or other scientific findings, conclusions, or assumptions establishing a regulatory level, standard, or other requirement for the protection of public health or the environment.”
- Actions requiring peer review may include, but are not limited to: development of water quality objectives, prohibitions of discharge, development of technical guidance such as mixing zone guidance, toxicity test protocols, and the selection of quantifiable targets in a Total Maximum Daily Load (TMDL).

- Peer review is not needed for source documents that have been previously peer reviewed by a recognized expert or body of experts. These include, for example, US EPA derived water quality criteria that are adopted as water quality objectives.
- Peer reviewers must not have been involved in any way with the development of the amendment.
- The number of reviewers and the specialties represented should be appropriate to the complexity of the issue.

E. AGENCY CONSULTATION

The State Board's CEQA regulations [23 CCR 3778] require consultation with other public agencies having jurisdiction with respect to the proposed activity (e.g., The Department of Fish and Game's authority under the California Endangered Species Act), and consultation with persons having special expertise with regard to the environmental effects involved in the proposed activity. This consultation will occur when the staff report, draft amendment and CEQA Checklist (i.e., the environmental documentation) are sent out for public comment; no separate action is required.

F. HEARING PROCEDURES

1. Noticing

Advance public notice of plan amendments and public hearing is required by CWC §13244. For amendments that include a prohibition, a notice must be published for three consecutive days in a newspaper of wide circulation in the area of the prohibition. For other actions, a notice must be published for one day in a newspaper of wide general circulation.

In addition, CEQA requires circulation of a Notice of Filing to the public and interested public agencies. Both a Hearing Notice and the Notice of Filing must be published at least 45 days prior to the hearing [40 CFR 25.5 and 23 CCR 3777, respectively].

When the State Board adopts a state policy, the State Board must hold a hearing and must notify all affected regional boards at least 60 days in advance of the hearing (unless the regional boards waive notice). Regional boards must submit any written comments to the State Board at least 20 days prior to the hearing. Public notice must be given in all affected regions in accordance with the noticing requirements above [CWC §13147].

2. Hearing

The Water Code requires that plans, policies, and guidelines and their amendments be adopted at a public hearing [CWC §13244].

- a) The hearing must, at a minimum, be recorded on audio tape [23 CCR 647.4]. Controversial matters should be recorded by a stenographic/court reporter.

- b) At the hearing, all interested persons are given an opportunity to be heard. Reasonable limitations on public participation are appropriate. There is normally no right to cross-examination at the hearings, but cross-examination may be allowed at the discretion of the Hearing Officer or the Chair, if it appears that the cross-examination will assist the State or regional board in its deliberations. Persons wishing clarification of prior evidence or comments may request such clarification from the State or regional board.
- c) Revisions to plan amendments must be based on the evidence developed during the hearing process. At the close of the hearing, the amendment may be adopted as proposed, or as revised at the hearing if (a) the revisions are a logical outgrowth of the evidence in the record and (b) the hearing notice has stated that changes to the amendment, consistent with its general purpose, may be considered by the Board. Only after responses are made to all comments may the Board act on the Plan [23 CCR 3779].

G. ADMINISTRATIVE PROCEDURES ACT REQUIREMENTS

The Office of Administrative Law (OAL) reviews regulatory provisions of Water Quality Control Plans, Policies, and Guidelines for compliance with six standards set out in the Administrative Procedures Act [Gov't Code §11353(b)]. The following summarizes these six standards.

1. Necessity

To satisfy the “necessity” standard, the record of the action under review must contain substantial evidence demonstrating the need for the regulatory provisions in the basin plan amendment, policy, or guidelines in question. (see Gov't. Code §11349(a)). Evidence may include facts, studies, and expert opinion.

OAL regulations specify that, in order to meet the necessity standard, the administrative record must include:

- a. A description of the public problem, administrative requirement, or other condition or circumstance that each provision of the regulatory action is intended to address;
- b. A statement of the specific purpose for each regulatory provision;
- c. Information explaining why each regulatory provision is required to carry out the specific purpose of the provision; and
- d. Each technical, theoretical, and empirical study, report, or similar document, if any, on which the agency relied in proposing the action [(1 CCR 10(b)].

2. Authority

“Authority” is the provision of law which permits or obligates an agency to adopt, amend, or repeal a regulation [Gov't Code §11349(b)]. Appropriate authority citation(s) for the adoption of:

- a. Basin plan amendments are (1) Water Code §13240 for regional board adoption, and (2) Water Code §13170 for State Board adoption.
- b. Policies is Water Code §13140;
- c. Guidelines in policies is Water Code §13142;
- d. Regional board guidelines are Water Code §13240 and §13245.5.

3. Reference

“Reference” means the statute, court decision, or other provision of law which an agency implements, interprets, or makes specific by adopting, amending or repealing a regulation [Gov’t Code §11349(3)]. For example, an appropriate reference citation for the adoption of water quality objectives in a basin plan would be Water Code §13241. This section requires the regional boards to establish reasonable protection of beneficial uses and the prevention of nuisance.

4. Consistency

“Consistency” means being in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or other provisions of law [Gov’t Code §11349(d)].

5. Clarity

“Clarity” is defined as “written or displayed so that the meaning of regulations will be easily understood by those persons directly affected by them” [Gov’t Code §11349(c)]. A regulation is presumed unclear, according to OAL regulations, if:

- a. The regulation has more than one meaning and the meanings cannot be harmonized under rules of statutory construction;
- b. The language of the regulation conflicts with the description of its effect;
- c. The regulation uses an undefined term which does not have a meaning generally familiar to those directly affected by the regulation;
- d. The regulation uses language incorrectly, including incorrect spelling, grammar or punctuation;
- e. The regulation presents information in a format not readily understandable; or
- f. The regulation does not use citations which clearly identify published material cited in the regulation [1CCR 16(a)].

6. Nonduplication

“Nonduplication” means a regulation does not serve the same purpose as a state or federal statute or another regulation [Gov’t Code §11359(f)]. A regulation that repeats or rephrases a statute or regulation is considered by OAL to serve the same purpose as that statute or regulation [1 CCR 112].

There are exceptions to the nonduplication standard. A regulation may duplicate or overlap a state or federal statute or regulation where necessary to satisfy the clarity standard, or where it is federally mandated or authorized by a specific statute or provision of law [1 CCR 112].

H. FEES

The Department of Fish and Game (DFG) collects a filing fee (currently \$850) to offset the costs of reviewing environmental documents (e.g., plan amendment, staff report and CEQA Checklist). No filing fees are required, however, for projects that are statutorily or categorically exempt from CEQA or are found to be “de minimis” in their effect on the environment (i.e., no significant impact). The filing fee must be paid to the Secretary for Resources, or, if a “de minimis” finding is appropriate, a Certificate of Fee Exemption (DFG form 753.5 – 5/91) must be submitted to the Resources Agency with the Notice of Decision.

H. EFFECTIVE DATE OF THE AMENDMENT

Amendments to water quality control plans go into effect on the date of approval by the final approving authority (if the DFG filing fee has been paid or a Certificate of Fee Exemption has been submitted). In most cases (surface water standards actions), the final approving authority will be US EPA. For regulatory actions that do not need US EPA approval (e.g., groundwater standards), OAL's approval is final. Amendments that do not have a regulatory component (e.g., administrative changes) are in effect when approved by the State Board.

Prior to May 30, 2000, all Plan amendments were considered effective upon approval by OAL. On that date revised US EPA regulations became effective, which provide that new or revised state surface water quality standards are not in effect until approved by US EPA. However, the regulation is not retroactive, and amendments approved by OAL prior to May 30, 2000 are effective as of the date of OAL approval. Any water quality standard in effect after approval by OAL, i.e., prior to May 30, 2000, but subsequently disapproved by US EPA remains in effect until it is revised or US EPA promulgates a superseding water quality standard [40 CFR 131.21].

APPENDIX B – ATTACHMENT 1

STANDARD BENEFICIAL USE DEFINITIONS

The following are the beneficial uses for surface and groundwaters that have been adopted by the regional boards in basin plans and have been approved by the State Board. Not all of the beneficial use definitions listed below are appropriate for each basin. The uses and their definitions and abbreviations are to remain standard for all basins.

Municipal and Domestic Supply (MUN) - Uses of water for community, military, or individual water supply systems including, but not limited to, drinking water.

Agricultural supply (AGR) - Uses of water for farming, horticulture or ranching including, but not limited to, irrigation, stock watering, or support of vegetation for range grazing.

Industrial Process Supply (PROC) - Uses of water for industrial activities that depend primarily on water quality.

Industrial Service Supply (IND) - Uses of water for industrial activities that do not depend primarily on water quality, including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well repressurization.

Groundwater Recharge (GWR) - Uses of water for natural or artificial recharge of groundwater for purposes of future extraction, maintenance of water quality, or halting salt water intrusion into fresh water aquifers.

Fresh Water Replenishment (FRSH) - Uses of water for natural or artificial maintenance of surface water quantity or quality (e.g., salinity).

Navigation (NAV) - Uses of water for shipping, travel, or other transportation by private, military, or commercial vessels.

Hydropower Generation (POW) - Uses of water for hydropower generation.

Water Contact Recreation (REC-1) - Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, or use of natural hot springs.

Non-Contact Water Recreation (REC-2) - Uses of water for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.

Ocean Commercial and Sport Fishing (COMM) - Uses of water for commercial or recreational collection of fish and shellfish, or other organisms including, but not limited to, uses involving organisms intended for human consumption or bait purposes.

Aquaculture (AQUA) - Uses of water for aquaculture or mariculture operations including, but not limited to, propagation, cultivation, maintenance, or harvesting of aquatic plants and animals for human consumption or bait purposes.

Warm Fresh Water Habitat (WARM) - Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

Cold Fresh Water Habitat (COLD) - Uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

Saline Water Habitat (SAL) - Uses of water that support inland saline water ecosystems including, but not limited to, preservation or enhancement of aquatic saline habitats, vegetation, fish, or wildlife, including invertebrates.

Estuarine Habitat (EST) - Uses of water that support estuarine ecosystems including, but not limited to, preservation or enhancement of estuarine habitats, vegetation, fish, shellfish, or wildlife (e.g., estuarine mammals, waterfowl, shorebirds).

Marine Habitat (MAR) - Uses of water that support marine ecosystems including, but not limited to, preservation or enhancement of marine habitats, vegetation such as kelp, fish, shellfish, or wildlife (e.g., marine mammals, shorebirds).

Wildlife Habitat (WILD) - Uses of water that support terrestrial ecosystems including, but not limited to, preservation or enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

Preservation of Biological Habitats of Special Significance (BIOL) - Uses of water that support designated areas or habitats, such as established refuges, parks, sanctuaries, ecological reserves, or Areas of Special Biological significance (ASBS), where the preservation or enhancement of natural resources requires special protection.

Rare, Threatened, or Endangered Species (RARE) - Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened or endangered.

Migration of Aquatic Organisms (MIGR) - Uses of water that support habitats necessary for migration or other temporary activities by aquatic organisms, such as anadromous fish.

Spawning, Reproduction, an/or Early Development (SPWN) - Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.

Shellfish Harvesting (SHELL) - Uses of water that support habitats suitable for the collection of filter-feeding shellfish (e.g., clams, oysters, abalone, and mussels) for human consumption, commercial or sport purposes.

Flood Peak Attenuation/Flood Water Storage (FLD) - Beneficial uses of riparian wetlands in flood plain areas and other wetlands that receive natural surface drainage and buffer its passage to receiving waters.

Water Quality Enhancement (WQE) - Beneficial uses of waters that support natural enhancement or improvement of water quality in or downstream of a water body including, but not limited to, erosion control, filtration and purification of naturally occurring water pollutants, streambank stabilization, maintenance of channel integrity, and siltation control.

Limited Warm Freshwater Habitat (LWRM) - Waters support warm water ecosystems which are severely limited in diversity and abundance as the result of concrete-lined watercourses and low, shallow dry weather flows which result in extreme temperature, pH, and/or dissolved oxygen conditions. Naturally reproducing finfish populations are not expected to occur in LWRM waters.