

## SECTION 1

### INTRODUCTION

This document comprises the North Coast Regional Water Quality Control Board's chapter for the Integrated Plan for Implementation of the Watershed Management Initiative (WMI). The process for the Regional Water Board is responsive to the Watershed Management Initiative called for in the State Water Resources Control Board Strategic Plan (updated in 2001). It essentially involves designating Watershed Management Areas (WMAs) and performing the following steps:

- assessing water quality related issues on a watershed basis,
- developing prioritized water quality goals for watersheds from the issues,
- addressing the issues with various programs and
- evaluating progress.

The chapter identifies priorities to be funded by existing resources, as well as priority tasks that are currently not funded, including those that might be potential projects for grant applications. The WMI Chapter is not a commitment to complete work. Work commitments are made in fund source-specific workplans. The chapter may be used to provide information for making informed decisions on which activities to be funded by specific workplans.

This chapter is dynamic, and as such, represents the best information and strategy at the time of this writing and for the resources made available to develop it. This document is an administrative management tool, and by its very nature, must be flexible and responsive to the adaptive management required in addressing issues with changing priorities and new information. The following is a description of each of the sections:

#### **Section 1 - Introduction**

This section briefly describes the Region's Chapter, and water quality management in the Region.

#### **Section 2 - Watershed Activities**

2.0 Background - explanation of watershed management for the six Watershed Management Areas (WMA) in the Region. Each WMA plan includes statements of concerns and issues, water quality goals, and an implementation strategy.

#### **Section 3 - Regional Activities**

Activities not prioritized on a watershed basis are explained.

#### **Appendices**

Appendix A - Beneficial Use Definitions

Appendix B - Nonpoint Source Program

Appendix C – Critical Coastal Areas

Appendix D – Acronyms

Appendix E – Water Quality Priorities

Appendix F – Grant Projects in the North Coast Region

#### **The North Coast Regional Water Quality Control Board's Process**

The focus of the watershed-based effort is to assure all Regional Water Board activities are coordinated throughout a watershed in an efficient, integrated manner. Non-discretionary

activities, such as issuing federal permits, will continue in all watershed areas. Related land use issues will be addressed through Nonpoint Source Program compliance with appropriate enforcement. Water resource issues will be coordinated with appropriate state and federal agencies, such as the State Water Resources Control Board's Division of Water Rights, the Department of Water Resources, and the US Environmental Protection Agency.

For the purposes of this process, "management area" is the basic planning unit and may contain one or more drainage "basins" or "watersheds." The Regional Water Board Watershed Management Areas (WMAs) and their watersheds are depicted in Figure 1-1. They are:

- 2.1 Russian/Bodega WMA
- 2.2 Klamath WMA
- 2.3 North Coast Rivers WMA
  - 2.3.3 Mattole River
  - 2.3.4 Ten Mile River
  - 2.3.5 Noyo River
  - 2.3.6 Big River
  - 2.3.7 Albion River
  - 2.3.8 Navarro River
  - 2.3.9 Greenwood Creek
  - 2.3.1 Garcia River
  - 2.3.12 Gualala River
- 2.4 Humboldt Bay WMA
- 2.5 Eel River WMA
- 2.6 Trinity River WMA



Note that the "management areas" are on a different scale than the basins and hydrologic units specified in the Water Quality Control Plan for the North Coast Region (Basin Plan) <http://www.waterboards.ca.gov/northcoast/programs/basinplan/basin.html>. This is a conscious effort to reduce the number of units within this process for reasonable assessment and budgeting. The individual watersheds and hydrologic units are not ignored and may be assessed at that finer level of resolution. The Regional Water Board activities to address issues and problems are prioritized in recognition of the reality that resource allocations change.

The overall process involves first identifying and assessing the water quality problems in the basin, and second, developing a strategy to implement specific activities to address the identified problems. Assessment is on a continuous basis and is concentrated in watersheds with developing Total Maximum Daily Loads (TMDLs). Implementation of the resultant strategy is then scheduled according to the complexity of the issues and the tools and resources available to address the issues. Water quality goals to be addressed are prioritized. When the short-term goals are reached, the activities to address long-term goals are then addressed as resources allow. This planning document resulting from the process is a multi-year watershed management document for water quality activities.

Additionally, addressing the ocean and near shore areas not included in harbors or bays in individual WMAs is necessary. It is recognized that near shore areas may be affected by land-based activities in specific watersheds. The Regional Water Board will attempt to determine the extent to which land-based activities are affecting ocean resources when data indicate ocean impacts. The watershed approach would be used to address the freshwater and land-based problems. Also, some form of regional or statewide ocean and near shore monitoring program should be supported. See Appendix C for information on Critical Coastal Areas.

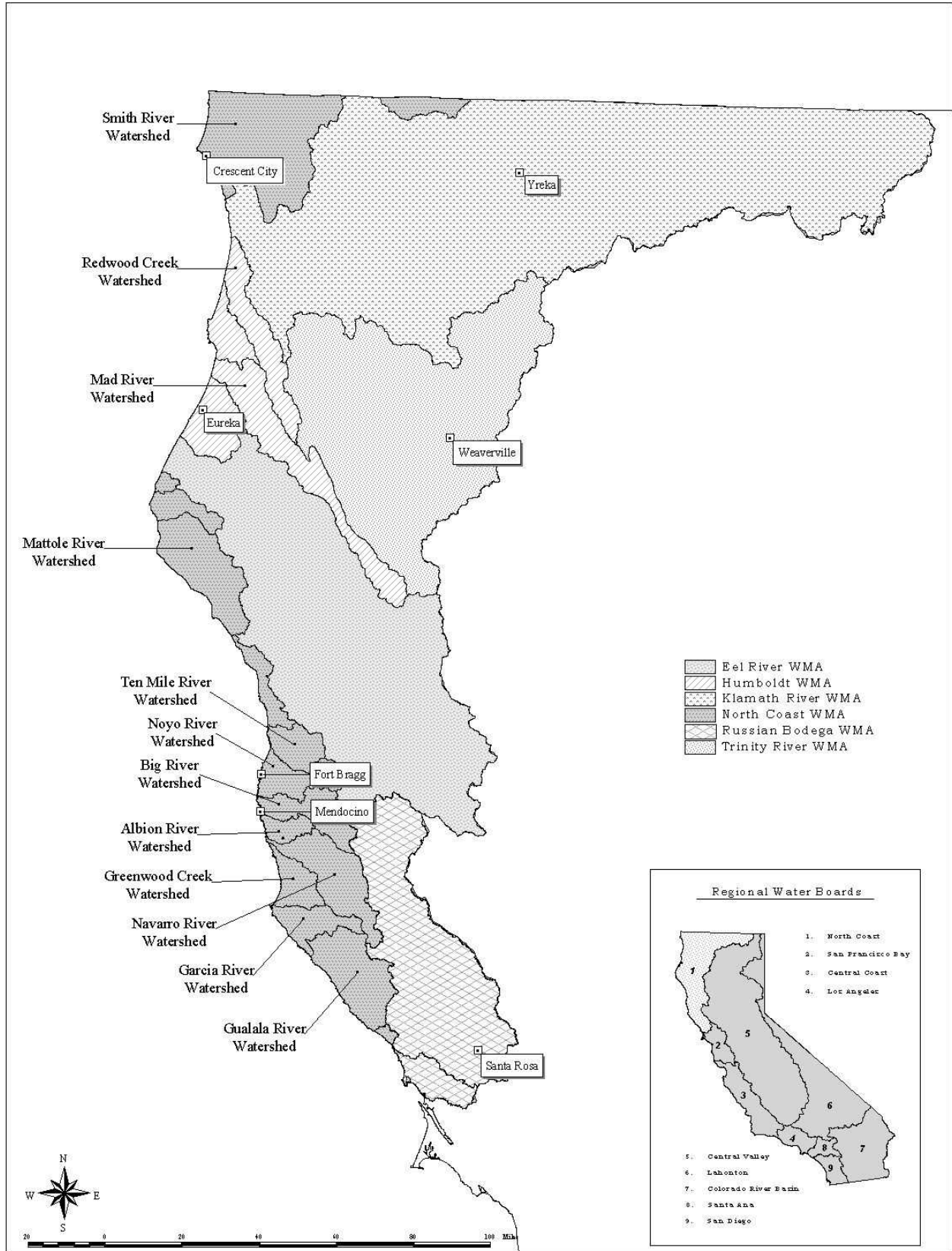


Figure 1. Watershed Management Areas for the North Coast Regional Water Quality Control Board

The watershed planning process in the North Coast Region is intended to provide an administrative tool to facilitate budgeting decisions on the basis of issues, concerns, and problems and completed watershed analyses. As such, numerous new activities are identified and prioritized. However, inadequate funding for existing programs makes it difficult to address new issues. If additional funding becomes available, those issues will be addressed in a priority order.

The North Coast Regional Water Quality Control Board faces numerous water quality issues. Overarching water quality issues in the Region are protection of the coastline, protection and restoration of anadromous fish populations, protection of drinking water, and pollution prevention. More specifically water quality problems include contamination of surface water due to nonpoint source pollution from storm water runoff, erosion and sedimentation (roads, agriculture, and timber harvest), failing septic tanks, channel modification, gravel mining and dairies, and MTBE and dioxin contamination. Ground water contamination from PCE, leaking underground tanks, and health and safety issues from contaminated areas that are open to the public are also priority issues. High priority water quality problems due to point sources include chronic violations by some POTWs and lack of permit compliance. Lack of or limited funding for water quality monitoring and watershed assessment compounds the difficulty of addressing these issues. See Appendix B - Nonpoint Source Program, Table 1 for Regional nonpoint source problems.

### **Highest priority activities in the North Coast Region**

(revised December 2004)

- Implementing TMDLs for sediment in 16 coastal watersheds
- Completing all Klamath Basin TMDLs by December 2005
- Maintaining the core regulatory program for regulated dischargers, including stormwater
- Developing a monitoring strategy for the region and integrating SWAMP with TMDL monitoring
- Regulating vineyards and timber activities
- Developing policies for runoff from roads
- Maintaining the ground water cleanup programs for high priority sites
- Improving outreach and community involvement in decisions
- Fostering watershed groups and citizen monitoring
- Protecting Critical Coastal Areas
- Promote water recycling activities
- Developing a freshwater beach program with the Sonoma Co. Health Dept. for the Russian River

The highest priority issues that need more funding if they are to be properly addressed are: TMDL implementation, responses to contaminated drinking water wells, inspection and enforcement of nonpoint source pollution issues, monitoring and assessment, outreach and education, basin planning efforts to update water quality objectives in the Basin Plan to protect threatened species and beneficial uses, and improvement of state and local government interactions.

In the **Russian/Bodega WMA** (see pg. 13-36) the primary water quality goals focus on protecting beneficial uses of surface and ground water such as salmonid fishery values, recreation, and domestic, municipal and agricultural water supply. Maintaining the core regulatory activities associated with point source waste discharges to surface and ground water from municipal and industrial sites is a high priority. Permitting, compliance inspections, enforcement and cleanup activities are performed on those facilities with the highest threat and/or actual impact on water quality. Discharges of PCE, petroleum hydrocarbons, pesticides, nutrients, bacteria and sediment are the primary pollutants of concern. Nonpoint source discharges are addressed by the core regulatory program storm water permits and inspections, and by the nonpoint source program through timber harvest inspections, outreach, grants, and promoting land management measures that are protective of beneficial uses. Critical Coastal Areas in the Russian/Bodega WMA include: 1) the Bodega Marine Life Refuge, 2) the Estero Americano, and 3) the Estero de San Antonio.

In the **Klamath WMA** (see pg. 37-54) the following broad goals provide a focus for water quality control activities: 1) protect and enhance the salmonid fishery (mainstem and tributaries below Iron Gate Dam), 2) protect and enhance warm water and endangered aquatic species, 3) maintain the viability of agriculture and timber uses, 4) maintain recreational opportunities, and 5) protect ground water uses. The Critical Coastal Area in the Klamath WMA is the mouth of the Klamath River.

In the **North Coast River WMA** (see pg. 55-138) the overall emphasis is the inspection of timber harvest plans for implementation of the Forest Practice Rules and best management practices to ensure protection of water quality and beneficial uses. The Regional Water Board is expanding timber harvest program activities on private land in concert with California Department of Forestry and Fire Protection. The future development of TMDL waste reduction strategies for sediment is another primary activity by Regional Board staff. The Critical Coastal Areas in the North Coast WMA are: 1) Mattole River, 2) King Range National Conservation Area, 3) Pudding Creek, 4) Noyo River, 5) Pigmy Forest Ecological Staircase, 6) Big River, 7) Albion River, 8) Navarro River, 9) Garcia River, 10) Kelpbeds at Saunders Reef, 11) Del Mar Landing Ecological Reserve, and 12) Gerstle Cove.

In the **Humboldt Bay WMA** (see pg. 139-160) the following broad goals provide a perspective from which to view the specific goals and actions presented Section 2.4: 1) improve coordination, education, outreach, assessment, and monitoring, 2) protect surface and ground water uses for municipal supply, recreation, and industrial shellfish harvest, and 3) protect and enhance the anadromous salmonid resources. The Critical Coastal Areas in the Humboldt Bay WMA are: 1) Redwood Creek, 2) Redwood National Park, 3) Kelpbeds at Trinidad Head, and 4) Mad River.

In general, the primary issues associated with water quality in the **Eel River WMA** (see pg. 161-176) are focused on the beneficial uses for drinking water supply, recreation, and the salmonid fishery. Since the watershed is located in steep forested terrain with highly erosive soils and high rainfall, erosion and sediment production and transport are high. For most of the WMA the issues of temperature and sedimentation and their impacts on the salmonid fishery are of high concern, involving the timber and rangeland industries. Other issues include ground water contamination, dairies in the delta area near the ocean, and localized contamination of surface and ground waters. The Critical Coastal Area in this WMA is the Eel River.

The Trinity River watershed (see pg. 177-188) is also located in steep forested terrain with highly erosive soils and high rainfall, erosion and sediment production and transport are high. The issues of temperature and sedimentation and their impacts on the salmonid fishery are of high concern, involving the timber and rangeland industries. The broad goals for this WMA) include improving the anadromous fishery through sediment reductions and habitat enhancements and maintaining the other high beneficial uses of both surface and ground water.

### **Regional Water Board Programs**

The major programs or work efforts that will be used to address problems and achieve goals in a specific management area are consolidated into ten groups and will be used in the Implementation sections of individual WMA plans.



### **Assessment**

Assessing waterbody condition and specific relationships of land use or waterbody system dynamics is essential to identifying issues and assigning activities for correcting problems. Additional components of assessment include gathering public perspectives on water quality related issues and assessing the adequacy of existing institutional frameworks in correcting problems. Focused water quality studies, TMDL approaches, ground water pollution identification, nonpoint source assessments, and full watershed assessments are included. The North Coast Watershed Assessment Program is described in more detail in Section 3: Regional Activities.

### **Monitoring**

Trends in water quality and habitat, and the effectiveness of control strategies and TMDLs will be monitored through the Surface Water Ambient Monitoring Program

(SWAMP) sampling program, established photo points, aerial observation, and other observations relevant to the problems being addressed and the activities being used. Activities include discharger compliance and self-monitoring under the core regulatory and ground water programs. SWAMP is described in more detail in Section 3: Regional Activities and <http://www.waterboards.ca.gov/northcoast/programs/swamp.html>.

### **Core Regulatory**

The Regional Water Board issues federal National Pollutant Discharge Elimination System (NPDES) permits for discharges of waste to waterbodies in the Region, and state Waste Discharge Requirements (WDRs) for wastes contained on site or discharged to land. Both prescribe the quantity, quality, and conditions under which waste can be discharged and require self-monitoring. Activities include issuance of new permits/WDRs, updating existing permits/WDRs, compliance inspections, review of self-monitoring reports, response to spills and complaints, storm water runoff, and associated enforcement. In addition, SB 390 required the Regional Water Board to update waivers of waste discharge requirements on January 1, 2003. See Appendix B, Table 3 for the waiver schedule.

### **Ground water**

Activities to protect and clean up ground water are associated with Spills, Leaks, Investigations, and Cleanup (SLIC), wellhead protection, the above ground and underground tank programs (including local oversight programs), as well as site mitigation activities under the Department of Defense and Superfund programs.

### **Water Quality Certification**

Activities are associated with the Clean Water Act (CWA) section 401 certification that relates to protection of wetlands and stream channel work and activities.

### **Nonpoint source**

The long term goals are aimed at enhancing the overall recognition and understanding of nonpoint sources of pollution, especially sediment and nutrients, and elimination of the those sources as limiting factors in the maintenance and enhancement of salmonid populations, other aquatic organisms, and water supply. The program follows the statewide Nonpoint Source Pollution Control Program, using NPS Enforcement Policy (see Appendix B). Timber harvest on state, federal, and private lands, and the development of TMDL waste reduction strategies are high priority throughout the region. Localized agricultural problems are being addressed in the upper Klamath/Lost River area, Shasta and Scott River watersheds, Eel River delta area, and the Russian River WMA. Outreach and specific nonpoint source activities are taking place in the WMAs. See Appendix B for more information on nonpoint source efforts and Appendix C for Critical Coastal Areas that have been designated as a result of nonpoint source pollution.

Regional Water Board staff is proposing a new Total Maximum Daily Load (TMDL) Implementation Policy for Sediment Impaired Receiving Waters in the North Coast Region, which is applicable to all sediment impaired watersheds in the Region. The goals of the proposed TMDL Implementation Policy are to control sediment waste discharges so that TMDLs are met, sediment water quality objectives are attained, and beneficial uses are no longer adversely affected by sediment. The proposed Sediment TMDL Implementation Policy takes the form of a Resolution from the Regional Water Board which will also give direction to the Executive Officer to develop a workplan

describing how and when actions will be taken to address sediment waste discharges. Such actions include the development of a monitoring strategy and a sediment control guidance, the use of available authorities and tools to more effectively address sediment waste discharges, memoranda of understanding with other agencies, and cooperation with landowners, stakeholders, and organizations. Also under development is a Regional Sediment Amendment to the Basin Plan with prohibitions and an Action Plan, which will provide more enforcement tools to the TMDL Implementation Policy for controlling sediment. See Section 3, Regional Activities for more information on these efforts.

### **Timber Harvest**

The Regional Water Board has an extensive timber harvest program where staff review and inspect timber harvest plans on private lands for implementation of the Forest Practice Rules and compliance with recently adopted General Waste Discharge Requirements (WDRs) or a Categorical Waiver. Additionally, staff reviews U.S. Forest Service timber sales for implementation of best management practices and compliance with a recently adopted Categorical Waiver to ensure protection of water quality and beneficial uses.

### **Wetlands**

The Regional Water Board has wetlands in lagoon areas along the coast and in the Santa Rosa Plain. Many of these areas are threatened by development activities such as new housing projects and vineyards. Long-term goals are directed toward wetland protection and management. Most activities to protect wetlands take the form of Clean Water Act (CWA) section 404 review and CWA section 401 Water Quality Certification. At this time, other agencies are taking the lead on wetlands in the region such as the Army Corps of Engineers, the Department of Fish and Game, and the Division of Water Rights. The Regional Water Board will develop a policy concerning wetland conservation in the region starting with an inventory and mapping of the resource, assessing the current conditions, and forming a strategy for conservation. See Section 3: Regional Activities for more information on the wetland activities.

### **Local Contracts/Agreements**

The Clean Water Act section 319(h) grant program, and Water Bond (Propositions 13, 40 and 50) grants result in contracts and grant agreements with local agencies or non-profit entities to plan, monitor, and improve water quality. See <http://calwatershedfunds.org/index.php>, <http://getgrants.ca.gov/>, or <http://www.waterboards.ca.gov/nps/grantinfo.html> for funding sources and Appendix E for water quality priorities and target projects.

### **Water Quality Planning**

Regional Water Board planning activities include the basin plan Triennial Review process, development of water quality objectives, development of action plans (including TMDLs), participation in watershed planning activities (including local watershed groups), Basin Plan amendments, and review of environmental documents. The Triennial Review process was started again in May 2004. Some planning tasks are watershed based; others are regional in nature. A contract with the Sonoma County Water Agency for review and revision of water quality standards to comply with a "no take" provision of salmonids listed in the Russian/Bodega WMA under the federal Endangered Species Act is currently active. The Basin Plan objectives have been reviewed, and changes to temperature, dissolved oxygen and sediment objectives are



being proposed. See Section 3: Regional Activities for more information on Basin Plan revisions currently planned or underway.

**Regional (Non-Watershed Based) Activities**

Activities not prioritized or targeted on a watershed basis are addressed differently. Examples of these are: underground tank program, Department of Defense cleanup sites, and core regulatory activities like permit adoption and inspections. For activities of a regional nature, such as Triennial Review of the Water Quality Control Plan (Basin Plan) for the North Coast Region and the Water Quality Assessment (305(b) report), there are descriptions in Section 3: Regional Activities, as well as descriptions within the individual watershed sections appropriate to those activities that are specific to a particular WMA.

To the extent possible all activities within a WMA are incorporated in its section of this chapter irrespective of whether the activities are prioritized on a watershed basis. Descriptions of all activities that are not regional in nature will be phased into individual WMA sections as progress is made.

