SECTION 3

REGIONAL ACTIVITIES

As introduced previously, some programs are regional (not prioritized on a watershed basis). For instance, some mandated non-discretionary activities, such as core regulatory and underground tank cleanups, be carried out throughout the Region. To the extent possible, all activities are included in individual WMA plans. The following explanation of individual programs addresses those activities that occur region wide where the process of prioritizing by WMA has not occurred. For Regional Water Board water quality priorities see Appendix E.

Assessment

The intent for the future is to develop or promote the development of a watershed restoration action plan for every watershed in the Region, building upon true watershed assessments. Due to resource constraints, assessments of waterbody conditions outside of targeted WMAs are on a case-by-case basis and generally associated with specific pollution events or localized concerns. Current assessments generally are mostly qualitative and in association with the regional Water Quality Assessment and Clean Water Act section 303(d) listings. Assessment of watersheds as ecological and economic units is essential to planning and resource allocation. At this time, such assessments are partially addressed in TMDL Implementation Policy, habitat conservation plans, and by local watershed groups and local agencies. A program spearheaded by the California Resources Agency, called the North Coast Watershed Assessment Program, has provided data from multiple sources for watershed assessment in targeted watersheds. The local efforts are sometimes supported by various funding sources.

The North Coast Watershed Assessment Program (NCWAP) was a multi-agency approach to gathering, developing, analyzing and presenting watershed assessments and data for north coast watersheds. In addition to the North Coast Regional Water Board, four agencies within the Resources Agency were involved: Department of Fish and Game, Department of Forestry and Fire Protection, Division of Mines and Geology, and Department of Water Resources. Each had specific tasks relating to gathering existing data, filling information gaps by collecting new data, analyzing the data, and presenting the resulting watershed assessments in a standardized format for agency, landowners, and watershed groups. NCWAP was closely coordinated with SWAMP and the outreach functions of the WMI Coordinator in the Regional Water Board. Activities associated with the NCWAP are detailed in individual WMA sections of this document. Even though NCWAP originated as a seven-year program intended to cover the whole north coast, funding for NCWAP was not allocated beyond FY 03-04.

Monitoring

The Surface Water Ambient Monitoring Program (SWAMP) for the North Coast Region consists of permanent sites with routine monitoring of core metrics for long-term trend detection and roving or rotating stations that will provide more detailed monitoring on a watershed basis, returning to each WMA on a five-year basis. The permanent stations' data will be applicable to a trend analysis as well as testing differences within stations, among stations, and between watersheds. Selection of the metrics is based on a standard suite to provide a broad view of water quality and watershed

health. See http://www.waterboards.ca.gov/northcoast/programs/swamp.html for SWAMP information.

The rotating approach is a stratified random design, with the major stratification being at the WMA scale. Selection of the metrics for this component of the program will be based on specific watershed characteristics, such as geology, hydrology, water supply, and land use patterns; drawing heavily from monitoring needs identified in the individual WMA sections in the WMI Chapter.

Objectives of SWAMP

- Develop baseline data for long-term trend detection of ambient water quality conditions in the Region
- Identify and characterize water quality problem areas
- Identify and characterize reference streams/stream reaches
- Document water quality improvements
- Make water quality information available to the public

Monitoring activities are detailed for each WMA in the individual sections of this document. Coordination with other monitoring programs is essential, including: State Mussel Watch, Toxic Substances Monitoring, Coastal Fish Consumption Monitoring, and other agency programs and special studies.

The rotation of the program began in the north coastal WMA in FY 2000-01, and moves into the Humboldt Bay and Eel WMAs in FY 2001-02, Klamath WMA in FY 2002-03, and Russian/Bodega WMA in FY 2003-04 and FY 2004-05 with some exceptions. Screening for estrogen disruptors began in FY 2000-01 in the Russian/Bodega WMA as a special study to test its efficacy elsewhere. Stream gages were installed or existing gages funded where they were most needed to support the long-term stations in FY 2000-01. These are modified as the rotation through WMAs occurs.

Tracking

As an adjunct to the monitoring efforts a comprehensive set of databases will be utilized to track trends in water quality, compliance with waste discharge requirements, effectiveness of restoration projects, and installation of BMPs including applied NPS management measures and practices. These databases will include SWIMS, SINC, self- monitoring reports, Timber Harvest Plans (THPs) post-harvest inspections, and grant project reports via a survey form submitted to the State Water Resources Control Board (SWRCB). The SWRCB has a contract with the Information Center for the Environment (ICE) at U.C. Davis to track the effectiveness of management measures addressed in grant projects. This information will be available through the CERES database, designated as the Natural Resources Project Inventory (NRPI). The databases will also include data from volunteer monitoring efforts. Each regional board has the benefit of one-third of a PY (housed at the SWRCB in Sacramento) to help implement volunteer monitoring in the region. Local Resource Conservation Districts are actively promoting volunteer monitoring and gathering of data. Any information from these data sources that is appropriate will be incorporated into a developing GIS system. For a discussion of the Geographic Information System see the end of this section. In addition, the USEPA has the Grant Reporting and Tracking System (GRTS) to keep track of CWA section 319(h) grants. The Regional Water Board will contribute to this database. Also, a database to keep track of outreach and education activities is being developed and tested.

Core Regulatory

Waste discharger permit issuance/updates and compliance inspections occur on a scheduled basis per the SWRCB Administrative Procedures Manual. These permits are issued under the federal NPDES program or as WDRs. Internally within the Regional Water Board dischargers are prioritized by category, those of highest priority receiving attention first. As resources allow, staff will work through the priority list. Storm water program activities are targeting the highest priorities as well. Enforcement occurs on an as-needed basis, regardless of location.

Ground water

Ground water supplies high quality drinking water and irrigation water as well as industrial service supply and wildlife habitat supply. Ground water is also a source of freshwater to replenish streams and lakes. Historic and ongoing agricultural, urban, and industrial activities can, and have, degraded and contaminated the quality of ground water. Discharges to ground water from these activities include: underground and aboveground tank and sump leaks, agricultural and industrial chemical spills, landfill leachate, septic system failures, and chemical seepage via shallow drainage wells and abandoned wells. Impacts on ground water quality from these discharges are often long-term, difficult and costly to remediate. Therefore, prompt and expedient efforts to cleanup and contain source areas must be undertaken. Regional Water Board programs for ground water protection include the Underground Storage Tank Program, Aboveground Tank Program, and Spills, Leaks, Investigation and Cleanup Program.

Significant efforts are occurring in the Underground Storage Tank Program and other ground water programs. Though considerable work is done within the WMAs, the prioritization of activities is not necessarily on a watershed basis. Groundwater and surface water contamination is suspected at former and existing mill sites that historically used wood treatment chemicals. Discharges of pentachlorophenol, polychlorodibenzodioxins, and polychlorodibenzofurans likely occurred with poor containment typically used in historical wood treatment applications. These discharges persist in the environment and accumulate in surface water sediments and the food chain. Ground water contamination of aquifers used for drinking water is also a major concern. Additional investigation, sampling and monitoring, and enforcement actions are warranted, but insufficient resources exist to address toxic chemical contamination of ground water. To the extent possible these actions have been incorporated into the WMA sections.

Water Quality Certification

Certification pursuant to Clean Water Act sections 401 and 404 occur on an as-needed basis as well. Currently staff are attending program manager roundtables for 401 certifications for the lower Russian River watershed, finalizing new 401certification application package, and coordinating with the Army Corps of Engineers and CDFG regarding the Santa Rosa Plains wetlands. Projects potentially involving wetlands in all watersheds are reviewed. Funding is limited for the following needed activities: inspections and enforcement of wetland related activities, and development of an integrated permitting program to streamline the permitting process.

The North Coast Region's Water Quality Certification Program has become more developed over the past few years as a result of regulatory changes to the overall CWA section 401 program in July 2000. These changes to the program resulted in two major changes to the CWA section 401 program including: 1) the elimination of the ability to waive a water quality certification, and 2) the delegation of certification rights from the State Water Resources Control Board (SWRCB) to the Regional Water Quality Control Boards. Since July of 2000, the Regional Water Board has taken a very active role in administering the CWA section 401 program, and has also used it's Porter-

Cologne Act Authority in conjunction with the 401 authority, to insure the protection and proper management of the wetland resources in the Region. See the Wetlands Program below.

Nonpoint Source

Non-timber nonpoint source activities occur within the WMAs. For a listing of nonpoint source problems in the Region see Appendix B Nonpoint Source Program Table 1. Table 2 describes the education, outreach, and technical assistance efforts. Table 3 shows general waivers and Table 4 contains the Regional Water Board's partners. Timber harvest related nonpoint source activities are receiving increased attention in CWA section 303(d) listed waterbodies and are detailed in the individual WMA sections. Other nonpoint source areas of concern are confined animal facilities and storm water runoff. See Appendix B.

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.

Regional Water Board staff continues to work in concert with the California Department of Forestry and Fire Protection during the review and approval of proposed timber harvesting activities on private lands. The SWRCB and CDF/BOF entered into a Management Agency Agreement, which delegates some water quality protection responsibilities to the CDF/BOF associated with timber harvest regulation. The Regional Water Board has not given up any authority to regulate timber if violations of the Basin Plan occur or threaten to occur. More recently however, the Regional Water Board adopted General WDRs and a Categorical Waiver of WDRs for discharges related to timber harvesting on private timberlands. Regional Water Board staff continues to review timber harvest plans (THPs) and non-industrial timber management plans (NTMPs) and provide recommendations to CDF during the Review Team process. In addition, Regional Water Board staff must review THPs and NTMPs for compliance with the recently adopted General WDRs or waivers of WDRs.

The Regional Water Board currently has resources to oversee timber sale activities associated with USFS lands pursuant to the USFS MAA. Regional Water Board staff continues to review USFS timber harvesting activities for compliance with the recently adopted Categorical Waiver of WDRs and implementation of best management practices. Review of non-timber nonpoint source activities on USFS land is not well funded. Regional Water Board staff is unable to implement this portion of the USFS MAA except for responding to complaint issues on a case-by-case basis. This is a significant issue for future oversight by the Regional Water Board for these activities.

The North Coast Region has about 85 of its watershed areas designated as impaired by excess sediment from nonpoint sources under section 303(d) of the CWA. See Appendix B Table 1. The primary impaired beneficial uses are cold freshwater habitat, estuarine habitat, spawning, reproduction, and/or early development and municipal water supply. Salmonid species are listed as threaten or candidate species under the Federal Endangered Species Act. The Regional

Water Board is required to develop Total Maximum Daily Load (TMDL) plans (see http://www.waterboards.ca.gov/northcoast/programs/tmdl/Status.html) to recover the beneficial uses.

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. Through the Resolution, as currently proposed, the Regional Water Board will find that there is an immediate need to re-focus staff efforts to rely on the comprehensive regulatory tools provided by the Porter-Cologne Water Quality Control Act and the federal Clean Water Act to address anthropogenic sediment waste discharges and to attain the above stated goals. Through the Resolution, the Regional Water Board 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 in a non-enforcement and/or regulatory manner. The Regional Water Board considered the proposed TMDL Implementation Policy on November 29, 2004.

The TMDL Implementation Policy basically sets out commitments for staff, including using available regulatory tools to control sediment discharges. 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. For example, the amendment will state that dischargers have to control their existing discharges by developing and implementing an inventory, prioritization, control plan, and monitoring plan. Without the amendment, staff would have to rely on CAOs and WDRs to have this work done. The Regional Sediment Amendment will provide a much more effective and efficient tool.

A primary net of monitoring stations is needed to document the recovery of streams due to effects of sediment. Possible approaches include measuring cross sections in depositional reaches of major streams, measure width/depth ratios on depositional reaches over time, or include turbidity, suspended sediment and flow as additional parameters.

Wetlands

The North Coast Region contains many different variations of wetland habitat including coastal freshwater and estuarine wetlands, seasonal wetlands, vernal pools, and prior converted or altered wetland habitat. Many of these wetland areas provide habitat for rare and endangered species as well as species of special concern. In the northern portion of the region the dominant wetlands are seasonal and coastal while in the southern portion of the region vernal pools and seasonal wetlands are the dominant types of wetland habitat present. The majority of these habitats are threatened throughout the region by increasing development and land conversion activities such as housing, commercial developments, and vineyard production. In the Santa Rosa Plain, an area of 55,000 acres in Sonoma County, projects proposing the filling of vernal pools and seasonal wetlands are increasing. Long-term goals are directed toward wetland protection, mitigation of necessary impacts, restoration and enhancement and overall resource management.

Proposed projects potentially involving wetlands in all watersheds within the North Coast Region are reviewed and appropriate actions are taken. The CWA section 401 program in the North Coast Region is grossly under-funded. This leaves the protection and management of the Region's

wetland resources at jeopardy. Funding does not currently exist for the following important activities: 1) thorough inspections and enforcement for all projects potentially affecting wetland habitat, 2) follow-up of mitigation projects to insure success criteria, 3) thorough review of wetland mitigation monitoring reports to insure success criteria have been met, and 4) development of an integrated permitting program or Regional General Permit to streamline the permitting process.

Currently staff that work on CWA section 401 permit applications hold monthly in-house meetings to discuss all the pertinent issues of the program, exchange successes and problems, and outline needed changes to the program. In addition, staff attends the Statewide CWA section 401 roundtable held by the SWRCB, Regional Exchange meetings, and other Resource Agency meetings. The North Coast Region has also become involved in the Interagency Mitigation Banking Review Team (MBRT), made up of the U.S. Army Corps of Engineers (ACOE), California Department of Fish and Game (DFG), U.S. Fish and Wildlife (USFWS), and the U.S. Environmental Protection Agency (USEPA), and has recently become a signatory agency in the review and approval of proposed mitigation banks. The Regional Water Board staff has improved coordination with the ACOE, DFG, USFWS, USEPA and affected municipalities and residents regarding the permit activities that affect wetlands on the Santa Rosa Plain and the northern portion of the region. Increased coordination among the regulatory and local agencies has led to some streamlining of the permitting process as well as insuring that appropriate mitigation measures where required on numerous projects.

Local Contracts/Agreements

Clean Water Act section 319(h), state Water Bonds (Propositions 13, 40 and 50) and other funding sources provide grant funds for projects in the Region. All grants are targeted by WMA. Priority is given to 319(h) grant proposals that are for TMDL activities, fish habitat restoration and riparian enhancement, and for erosion and sediment control. See Appendix E for targeted implementation and planning projects. The Regional Water Board has a unit dedicated to solicitation, selection, and management of grant projects and generally manages about $10 million to $12 million in grant projects at any one time. See Appendix F for a list og grant projects in the North Coast region.

The Regional Water Board's Grants Unit is responsible for coordination and administration of various federal and state-funded grant programs for water quality protection. These funds have originated from a number of different sources and vary in funding levels through the years. Most common have been grant funds from the federal Clean Water Act, passed through the US Environmental Protection Agency, and also from voter-approved state proposition funds. Funding encompasses a variety of water quality issues, including watershed and fisheries restoration, Total Maximum Daily Load projects, other non-point source control projects, and municipal wastewater treatment plants.

Grant projects funded in the North Coast Region reflect both Regional Water Board and local watershed priorities and water quality problems facing the region. The grants program in the North Coast Region is viewed as an important component towards meeting Regional Water Board program water quality goals, and is carried out by staff in close coordination with local watershed groups, communities, and other stakeholders in a manner that reflects local needs.

Coastal and Beach Areas

The North Coast Region has 340 miles of ocean beaches and numerous miles of fresh water beaches along rivers. These areas are sites of many beneficial uses including wildlife, estuarine, aquatic, marine and wetland habitats, protection of rare and endangered species, contact and non-contact recreation, commercial and sport fishing, shellfish harvesting, and navigation. Land use adjacent to these areas impacts these beneficial uses. For example, urbanization, agriculture or timber harvesting alters water flows, decreases water quality, and promotes the filling of bays and estuaries by sediment. Some of the main concerns are pollution from pathogens, nutrients,

toxins, including metals, pesticides, and sediment. Issues in these areas are storm water runoff, dry weather urban runoff, oils seeps and spills, vessel traffic, pollution from marinas, sediment re-suspension, low dissolved oxygen, flooding and failing septic systems. Both acute health risks from pathogens and chronic health risks from contaminated fish consumption are issues that must be addressed.

Control of nonpoint source pollution and monitoring are two methods of controlling the risks to the public and the environment. Monitoring must include monitoring of the water column and sediment, tissue analysis of fish and shellfish, and assessment of the benthic invertebrate community. This monitoring is partially covered by the State Mussel Watch and Toxic Substances Monitoring Programs, but there is a lack of proper resources for the concentrated monitoring effort that is needed at beaches, both ocean and fresh water beaches. The North Coast Region needs to increase monitoring, assessment, and reporting, and improve interactions with public health agencies about data coordination and when to post warning signs at beaches. A concerted effort needs to be done on public education, resource stewardship and habitat protection. In addition, the Regional Water Board is participating in the Critical Coastal Area (CCA) effort by the California Coastal Commission. CCAs are described in Appendix C and mentioned in individual WMA sections of the Chapter.

Water Quality Legislation

The Porter-Cologne Water Quality Control Act (California Water Code) was enacted by the State of California in 1969 and became effective January 1, 1970. This legislation authorizes the State Water Board to adopt, review, and revise policies for all waters of the state (including both surface and ground waters) and directs the Regional Water Boards to develop regional Basin Plans. The California Water Code (§13170) also authorizes the State Water Board to adopt water quality control plans on its own initiative. In the event of inconsistencies among various State and Regional Water Board plans, the more stringent provisions apply.

The Clean Water Act (CWA), enacted by the federal government in 1972, was designed to restore and maintain the chemical, physical, and biological integrity of the nation's waters. One of the national goals states that wherever attainable water quality should provide for the protection and propagation of fish, shellfish, and wildlife, and provide for recreation in and on the water (i.e., fishable, swimmable). The CWA (§303[c]) directs states to establish water quality standards for all "waters of the United States" and to review and update such standards on a triennial basis. Other provisions of the CWA related to basin planning include section 208, which authorizes the preparation of waste treatment management plans, and section 319 (added by 1987 amendments) which mandates specific actions for the control of pollution from nonpoint sources. The 1987 amendments to the CWA (§307[a]) also mandate that states adopt numerical standards for all priority pollutants.

The USEPA has delegated responsibility for implementation of portions of the CWA to the State and Regional Water Boards, including water quality planning and control programs such as the National Pollutant Discharge Elimination System (NPDES). The Code of Federal Regulations (Title 40, CFR) and USEPA guidance documents provide direction for implementation of the CWA. Besides state and federal laws, several court decisions provide guidance for basin planning. One decision reaffirmed the public trust doctrine, holding that the public trust is "an affirmation of the duty of the state to protect the people's common heritage in streams, lakes, marshlands, and tidelands, surrendering that right of protection only in rare cases when the abandonment of that

right is consistent with the purposes of the trust." Public trust encompasses uses of water for drinking, commerce, navigation, fisheries, and recreation.

Basin Plans
Regional Board Basin Plans are designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, Basin Plans: 1) designate beneficial uses for surface and ground waters, 2) set narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's antidegradation policy, and 3) describe implementation programs to protect all waters in the Region. In addition, Basin Plan incorporates (by reference) all applicable State and Regional Water Board plans and policies and other pertinent water quality policies and regulations. Basin Plans are resources for the Regional Water Boards and others who use water and/or discharge wastewater. Other agencies and organizations involved in environmental permitting and resource management activities also use Basin Plans. Finally, Basin Plans provide valuable information to the public about local water quality issues.

Basin Plans are reviewed and updated as necessary. Following adoption by Regional Water Boards, the Basin Plans and subsequent amendments must be approved by the State Water Board, the State Office of Administrative Law (OAL), and the United States Environmental Protection Agency (USEPA). As part of the State's Continuing Planning Process, components of Basin Plans are reviewed as new data and information become available or as specific needs arise. Comprehensive updates of Basin Plans occur in response to state and federal legislative requirements and as funding becomes available. State Water Board and other governmental entities' (federal, state and local) plans, that can affect water quality, are incorporated into the planning process. In addition, Basin Plans provide consistent long-term standards and program guidance for the Region.

Beneficial Uses
Beneficial uses form the cornerstone of water quality protection under Basin Plans (see Appendix A for beneficial use definitions). Once beneficial uses are designated, appropriate water quality objectives can be established and programs that maintain or enhance water quality can be implemented to ensure the protection of beneficial uses. The designated beneficial uses, together with water quality objectives (referred to as criteria in federal regulations), form water quality standards. Such standards are mandated for all waterbodies within the state under the California Water Code. In addition, the CWA mandates standards for all surface waters, including wetlands.

Beneficial uses can be designated for a waterbody in a number of ways. Those beneficial uses that have been attained for a waterbody on, or after, November 28, 1975, must be designated as "existing" in the Basin Plans. Other uses can be designated, whether or not they have been attained on a waterbody, in order to implement either federal or state mandates and goals (such as fishable and swimmable) for regional waters. Beneficial uses of streams that have intermittent flows are designated as intermittent. During dry periods, however, shallow ground water or small pools of water can support some beneficial uses associated with intermittent streams; accordingly, such beneficial uses (e.g., wildlife habitat) must be protected throughout the year and are designated "existing." In addition, beneficial uses can be designated as "potential" for several reasons, including: implementation of the State Board’s policy entitled “Sources of Drinking Water Policy” (State Board Resolution No. 88-63), plans to put the water to such future use, potential to put the water to such future use, designation of a use by the Regional Water Board as a regional water quality goal, or public desire to put the water to such future use. See Appendix A for a list of beneficial uses and their definitions.

The Sources of Drinking Water Policy states that "All surface and ground waters of the State are considered suitable, or potentially suitable, for municipal or domestic waters supply and should be so designated by the Regional Boards ...[with certain exceptions which must be adopted by the Regional Board]."

Water Quality Objectives
The CWA (§303) requires states to develop water quality standards for all waters and to submit to the USEPA for approval all new or revised water quality standards that are established for inland surface and ocean waters. Water quality standards consist of a combination of beneficial uses and water quality objectives, as well as an antidegradation policy. Water quality objectives may be expressed as either numeric limits or a narrative statement.

In addition to the federal mandate, the California Water Code (§13241) specifies that each Regional Water Board shall establish water quality objectives. The Water Code defines water quality objectives as "the allowable limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area." Thus, water quality objectives are intended 1) to protect the public health and welfare, and 2) to maintain or enhance water quality in relation to the designated existing and potential beneficial uses of the water. Water quality objectives are achieved through Waste Discharge Requirements and other programs. These objectives, when compared with future water quality data, also provide the basis for identifying trends toward degradation or enhancement of regional waters.

There are also site-specific objectives. If a priority pollutant or criterion is inappropriate for a particular waterbody (i.e., it does not protect the beneficial uses or, based on site-specific conditions, a less stringent standard may be warranted), a water quality objective that differs from the applicable criterion or objective may be developed for the site. Scientifically defensible methods appropriate to the situation must be used to derive the objectives.

Triennial Review Process
The California Water Code, (§13240), directs the State and Regional Water Boards to periodically review and update Basin Plans. Furthermore, the CWA (§303 [c]) directs states to review water quality standards every three years (triennial review) and, as appropriate, modify and adopt new standards. In the Triennial Review Process, basin planning issues are formally identified and ranked during the public hearing process. These and other modifications to the Basin Plan are implemented through Basin Plan amendments as described below. In addition, the Regional Water Board can amend the Basin Plan as needed. Such amendments need not coincide with the Triennial Review Process.

Water Quality Planning
Adopted by the Regional Board in October 2004, the 2004 Triennial Review of the Basin Plan resulted in a Priority List of Planning Issues that describes the planning efforts the Regional Water Board intends to address in the next three years. The following table describes the proposed near and long-term resource allocations for Basin Planning activities and includes all the issues from the Priority List. Priority issues 1- 14 are anticipated to commence during the present triennial review period (2004-2007).

2004 Triennial Review Priority List and Workplan

Issue #	Issue Description	Estimated Staff Resources

		FY 04-05	FY 05-06	FY 06-07	FY 07-08	Total PYs
1	Regionwide Sediment Amendment (underway)	[0.5]	0	0	0	[0.5]
2	Clarify the Antidegradation Policy Language in the Basin Plan (underway)	0.3	0	0	0	0.3
3	Clarification of Seasonal Waste Discharge Prohibition for Incidental Runoff of Recycled Water and Potentially "Low Threat" Discharges	0.2 [0.3]	0	0	0	0.5
4	Complete an Amendment for the Protection of Cold Water Salmonid Habitat to Include DO and Temperature Objectives (underway)	0.5	0.3	0	0	0.8
5	Regional Update to the Water Quality Objectives for Bacteria (to include the Russian River) ♦♦#	0	0.4 [0.25]	0	0	0.65
6	Amend Section 4. Implementation Plans to Include TMDL Implementation Strategies (Action Plans) for 303 (d) Listed Waterbodies (To include Klamath and Trinity River Implementation Plans)	[1.0]	[1.0]	[1.0]	[1.0]	[4.0]
7	Consider Including a Policy Regarding Water Quality-Based Effluent Limitations and Mixing Zones**	0.1 [1.1]	0.25 [2.5]	0	0	3.95
8	Develop a Wetland and Riparian Protection Policy♦♦	0	0.7 [0.25]	0.25	0	1.2
9	Add Water Quality Objectives for Ammonia●	0	0	0.5	0	0.5
10	Consider Site Specific Objectives for Nutrients●#	0	0	0.5	0.25	0.75
11	Consider a Policy Describing Implementation of Narrative Water Quality Objectives for Surface and Groundwater ♦♦	0	0	0.5	0.25	0.75
12	Complete Editorial Revisions & Minor Clarifications or Corrections to Text Including Reference to New Laws, Plans & Regulations*	0	0.1 [0.5]	0	0	0.6
13	Update the Water Quality Objectives for Groundwater ♦♦	0	0	0	0.25 [0.25]	0.5
14	Address Russian and Eel River Priorities	[3.5]	[7.0]	[7.0]	[3.5]	[21.0]
15	Consider a Policy Addressing In-Stream Flow Issues	0	0	0	0	0
16	Develop a Road Management Policy	0	0	0	0	0
17	Review the Policy on the Control of Water Quality with Respect to On-site Wastewater Treatment and Disposal ●#	0	0	0	0	0
18	Add Biocriteria Objectives #	0	0	0	0	0

19	Review the Policy for Waivers of WDRs for Specific Types of Discharges.	**0**	**0**	**0**	**0**	**0**
20	Update the Beneficial Use Chapter #	**0**	**0**	**0**	**0**	**0**
21	Develop Basin Plan Language Requiring Waste Discharges to Comply with the California Toxics Rule Review Chemical Objectives in Section 3. Water Quality Objectives	**0**	**0**	**0**	**0**	**0**
22	Consider Seasonal Beneficial Uses and Objectives	**0**	**0**	**0**	**0**	**0**
23	Consider Updating the Policy on Pesticide Application	**0**	**0**	**0**	**0**	**0**
24	Explore Adding Activity-Based Action Plans into the Basin Plan (To Include Gravel Mining)**	**0**	**0**	**0**	**0**	**0**
25	Review the Seasonal Waste Discharge Prohibitions in Section 4. Implementation Plans**	**0**	**0**	**0**	**0**	**0**
26	Review the Issue of Endocrine Disrupters and Consider Water Quality Objectives**	**0**	**0**	**0**	**0**	**0**
27	Consider an Amendment Addressing Composting Operations •	**0**	**0**	**0**	**0**	**0**
28	Review Basin Plan for Consistency with Statewide Plans & Policies	**0**	**0**	**0**	**0**	**0**
29	Add Objectives for Total Residual Chlorine	**0**	**0**	**0**	**0**	**0**
30	Consider Updating the Sediment TMDL Action Plan for the Garcia River	**0**	**0**	**0**	**0**	**0**
	Resources for Triennial Review	**0.2**	**0.1**	**0**	**0**	**0**
	SUBTOTAL	**4.2**	**6.35**	**2.75**	**2.0**	**15.3**
	Funding Supported by TMDL resources [shown in brackets]	**[1.5]**	**[1.0]**	**[1.0]**	**[1.0]**	**[4.5]**
	Funding Supported Core-Regulatory, Cleanups, or Timber Division Resources [shown in brackets]	**[3.8]**	**[8.0]**	**[7.0]**	**[3.75]**	**[22.55]**
	Funding Supported by Interested Parties [shown in brackets]	**[1.1]**	**[2.5]**	**0**	**0**	**[3.6]**
	TOTAL TRIENNIAL REVIEW RESOURCES (subtotal resources minus funding supported by other division resources, and by interested parties)	**1.3**	**1.85**	**1.75**	**0.75**	**5.65**

*Editorial issues include, but are not limited to, the following: Update the Action Plan for the Santa Rosa Area, Update the Policy on the Disposal of Solid Wastes; Amend the Basin Plan to incorporate Waivers of WDRs and remove expired waivers, Add recognition of region and statewide programs including: SWAMP, GAMA, WMI)

****** The estimated staff effort assumes completion of a Basin Plan Amendment through Board adoption except in cases where indicated

♦♦ Amendment for this issue has been completed or is underway by another Regional Water Board. The North Coast Region will consider specific language.

Issue is on the Statewide Basin Planning List of top 5 issues to potentially be addressed with assistance by State Water Board.

• Issue currently undergoing workgroup review by the State Water Board or USEPA.

Basin Plan Amendments

Amending Basin Plans involves the preparation of an amendment, an environmental checklist, and a staff report. Public workshops can be held to inform the public about planning issues before formal action is scheduled on the amendments. Following a public review period of at least 30 days, the Regional Water Boards respond to public comments. Subsequently, the Regional Water Boards can take action on the draft amendments at a public hearing. The Basin Planning process has been certified as functionally equivalent to CEQA.

Following adoption by Regional Water Boards, Basin Plan amendments and supporting documents are submitted to the State Water Board for review and approval. Basin Plan amendments approved by the State Water Board must also be reviewed and approved by the State Office of Administrative Law (OAL). All amendments take effect upon approval by the OAL. In addition, the USEPA must review and approve those Basin Plan amendments that involve changes in state standards to ensure such changes do not conflict with federal regulations.

Statement of Policy with Respect to Maintaining High Quality of Waters in California

A key element of California's water quality standards is the state's Antidegradation Policy. This policy, formally referred to as the Statement of Policy with Respect to Maintaining High Quality Waters in California (State Board Resolution No.68-16), restricts degradation of surface or ground waters. In particular, this policy protects waterbodies where existing quality is higher than is necessary for the protection of beneficial uses.

Under the Antidegradation Policy, any actions that can adversely affect water quality in all surface and ground waters: 1) must be consistent with the maximum benefit to the people of the state, 2) must not unreasonably affect present and anticipated beneficial use of such water, and 3) must not result in water quality less than that prescribed in water quality plans and policies. Furthermore, any actions that can adversely affect surface waters are also subject to the federal Antidegradation Policy (40 CFR 131.12), developed under the CWA. The USEPA, Region IX, has also issued detailed guidance for the implementation of federal antidegradation regulations for surface waters within its jurisdiction. The Federal Clean Water Act §303(c)(2)(B) requires that states adopt numeric criteria for priority pollutants as part of the states' water quality standards.

Geographic Information Systems

Geographic Information Systems (GIS) has proven to be a very effective tool for use by staff of the State Water Board and Regional Water Boards in preparing TMDL's and implementing the Watershed Management approach. SWRCB funding has gone to support integration of the GEOWBS (developed for USEPA 305(b) reporting) into a desktop data management tool.

Many kinds of information currently in use at the Regional Water Board are well suited to the kinds of analysis made possible by GIS. Some more familiar topics include: 1) the identification of sources of pollution, especially diffuse (non point) sources of pollution, through analysis of temporal and spatial data sets; 2) calculation of road density, coupled with predictive erosion potential estimates and prioritization of probable sources; 3) analysis of past, present and potential landslide areas; 4) assessment of trends in water temperature variations and analysis of their causes; 5) analysis of the singular and cumulative effects of water diversions on multiple other beneficial uses of water in the watershed; 6) studies of ground water contamination plumes, their

sources, extent and interaction with surface waters, and; 7) the ability to integrate multiple issues within a watershed at one time. Rather than treating each issue individually, for example, site mitigation effects and studies of diffuse pollution can be integrated to both mitigate and protect resources. While existing program-focused database sets provide for some of these analyses to be performed now, the communication and prediction of effects of multiple aspects at the same time is best facilitated through GIS displays of relational database interactions.

Existing GIS resources represent a powerful and cost-effective tool to assist State and Regional Water Board staff in implementing the Watershed Management approach and preparing TMDL's for impaired water bodies. The TMDL development efforts at the Regional Water Board rely heavily on in-house and contract-based work.

GeoWBS Program: The GIS-enhanced Water Body System database (GeoWBS) is designed to accomplish CWA section 305 (b) assessment and section 303 (d) reporting requirements. For the 2003 CWA section 305 (b) water quality assessment update, the Regional Water Board entered the 2002 CWA section 303 (d) listed water bodies and water bodies from watersheds identified in the 2002 WMI Chapters for review into the GeoWBS system. In addition, the GeoWBS will be used for the next CWA sections 305(b) and 303 (d) updates and for on going TMDL status reporting.

State Water Board Plans

Plan for California Nonpoint Source Pollution Control Program (Nonpoint Source Program)
This plan is discussed in Appendix B.

Ocean Plan
The State Water Board adopted the Water Quality Control Plan for Ocean Waters of California in 1974 and amended this plan in 1988,1990, and 1997. It is currently (12/04) undergoing another revision. This plan, which is referred to as the Ocean Plan, establishes beneficial uses and water quality objectives for waters of the Pacific Ocean adjacent to the California coast outside of enclosed bays, estuaries, and coastal lagoons. The Ocean Plan also prescribes effluent quality requirements and management principles for waste discharges and specifies certain waste discharge prohibitions. Prohibitions include discharges of specific hazardous substances and sludge, bypasses of untreated waste, and discharges that impact Areas of Special Biological Significance (ASBS) also known as State Water Quality Protection Areas (SWQPAs).

Estuaries and Inland Waters Plan
State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California on March 2, 2000. The Policy is subject to review and approval by the USEPA, Region IX; meanwhile, the Policy went into effect upon the California Toxics Rule (CTR) being published in the Federal Register on May 18, 2000. In addition, the Policy was effective on Apri1 28, 2000 with respect to the priority pollutant criteria promulgated for California by USEPA through the National Toxics Rule (NTR) and to the priority pollutant objectives established by Regional Water Boards in their Basin Plans. The Policy represents the first phase in developing a new Inland Surface Waters Plan and Enclosed Bays and Estuaries Plan.

"Alaska Rule"
Previously, USEPA's water quality standards regulations provided that a State's and Tribe's water quality standards were in effect once adopted by the State or Tribe. USEPA had 60 days to approve or 90 days to disapprove such standards. A State or Tribal water quality standard remained in effect, even if USEPA disapproved it, until the State or Tribe revised it or USEPA promulgated a Federal rule to supersede the State or Tribal standard. Following a lawsuit in 1996 involving USEPA and a coalition of environmental groups, and a subsequent settlement

agreement, USEPA revised its regulations concerning the time State and Tribal water quality standards become effective for CWA purposes. Any State or Tribal water quality standards which went into effect under the old rule and was submitted to USEPA prior to March 30, 2000, remain in effect for CWA purposes, whether or not approved by USEPA, until replaced by federal water quality standards or approved State or Tribal standards. Any State or Tribal water quality standards that were submitted to USEPA after March 30, 2000, do not become "applicable" water quality standards for CWA purposes until approved by USEPA.